

The **MOTOR OWNER**



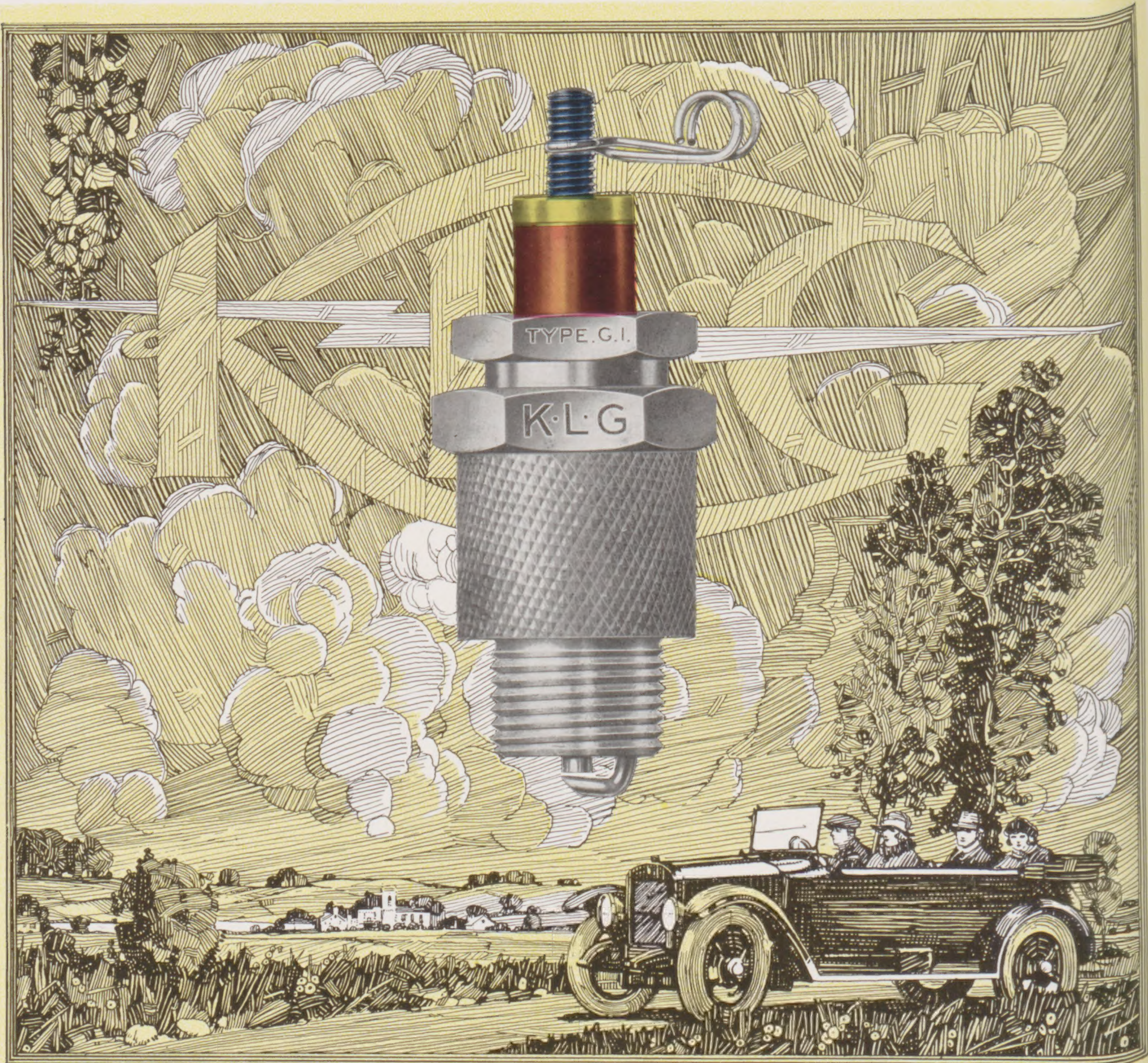
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PREPARATION

The Show

October 1922.

One Shilling.



K.L.G. Sparking Plugs

"G" TYPES

6/-

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Consistent successes in the Great International Races of the year have again proved in an unmistakable manner the pronounced superiority of "K.L.G." Sparking Plugs. The fact, too, that time and time again they are chosen for competing cars and motor cycles on which manufacturers of all nations are staking their reputations is a proof of the esteem in which they are held by those best fitted to judge.

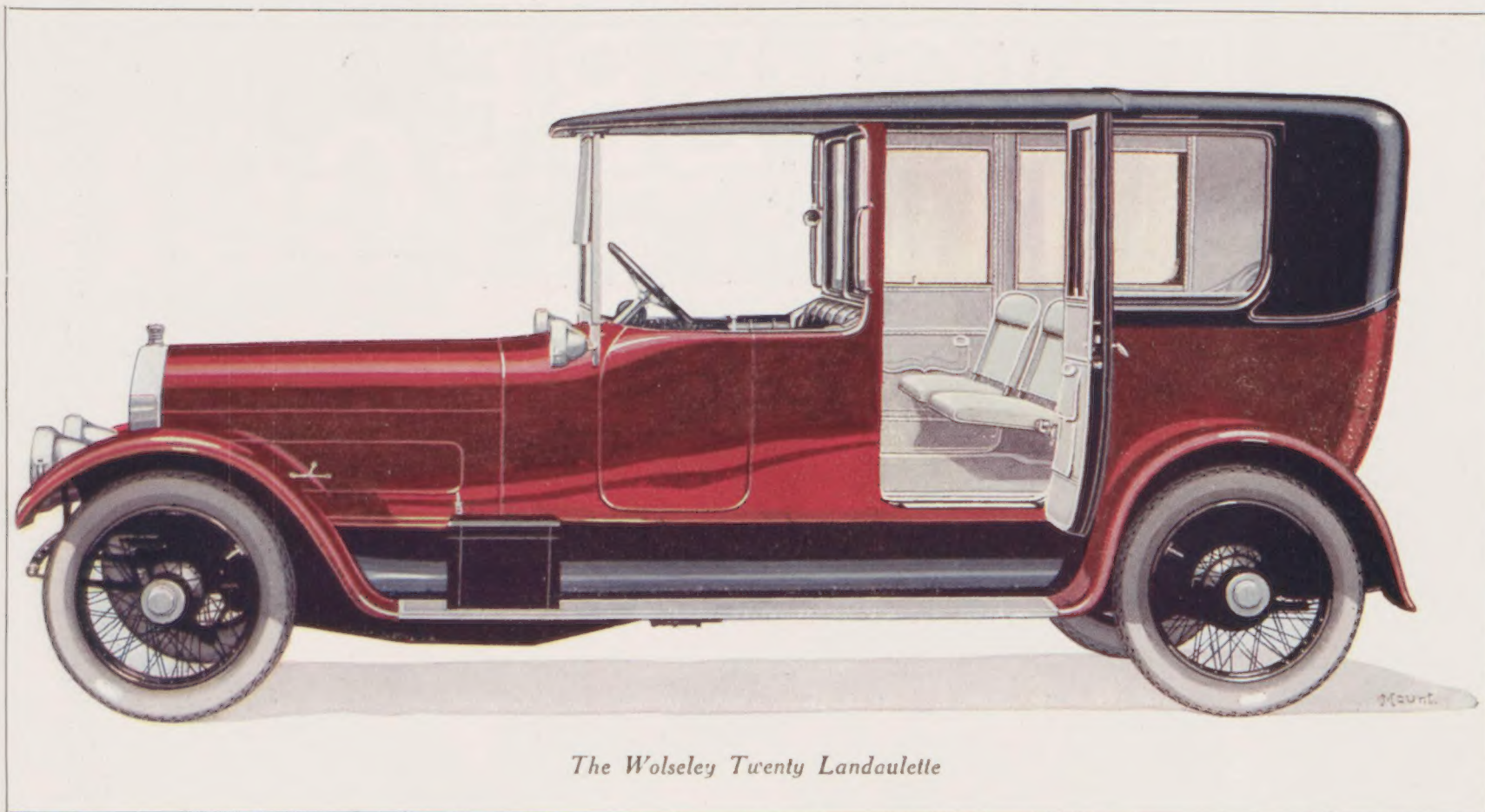
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Sole Export Agents: S. Smith & Sons (M.A.), Ltd., Central Works, Cricklewood



The Wolseley Twenty Landaulette

“WOLSELEY”

PRICES FOR 1923

These Prices rule from September 1st, 1922.

THE REMARKABLE SUCCESS which has attended the comprehensive Wolseley policy has been the most striking feature of the past motoring season. The great demand for Wolseley cars has enabled the Company to embark on a still wider programme of production and standardisation, with the result that they are able to make very substantial **Reductions in Prices**, whilst maintaining, and even increasing, the **quality of Wolseley Products**.

Write us for Catalogue No. 34, post free.

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Two-seater, *Specificn. A* £380

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Four-seater, *Specificn. A* £425

” ” ” *B* £400

Sporting Model - - £610

Two-seater Coupé—

Fixed Head £550

Two-seater Coupé—

Folding Head £590

The Wolseley Fourteen.

Touring Car - - £525

The Wolseley Fifteen.

Four-seater Touring Car £660

Five-seater ” ” £725

Seven-seater ” ” £825

The Wolseley Fifteen—contd.

Two-seater Touring Car £675

Sporting Model - - £795

Single Landaulette - - £895

Saloon—to seat four - - £895

Two-seater Coupé - - £895

Four-seater Coupé - - £975

Town Carriage - - £1050

The Wolseley Twenty.

Touring Car de luxe “C” £995

” ” ” ” “D” £1095

Sporting Model de luxe £1095

Landaulette de luxe - - £1275

Limousine de luxe - - £1300

Four-seater Coupé de luxe £1250

The Wolseley 24/30 h.p.

Town Landaulette de luxe £1500

Touring Landaulette - - £1450

Saloon-Limousine - - £1575

Dunlop Tyres fitted as standard.

WOLSELEY MOTORS LTD., Adderley Park, BIRMINGHAM

(Proprietors: Vickers, Limited)

London Showrooms: **WOLSELEY HOUSE, 157, Piccadilly, W.**

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H.P.	MODEL	NEW PRICE £
14-20	Standard Chassis	450
"	2-seater Standard Model	600
"	4-seater Standard Model	650
"	All-Weather Standard Model	750
"	Saloon Coupé	750
"	Coupé Model	800
"	Coupé de Luxe	850
"	Saloon	850
"	Landaulette	900
14-40	Sports Chassis	550
"	Sports 2-seater	700
"	Sports 4-seater	750

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Write for name and address of nearest authorised H.E. Agency; it will be worth while keeping in close touch with H.E. Car developments.

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If you have not been, you must visit it!*

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ENTIRELY NEW MODELS**

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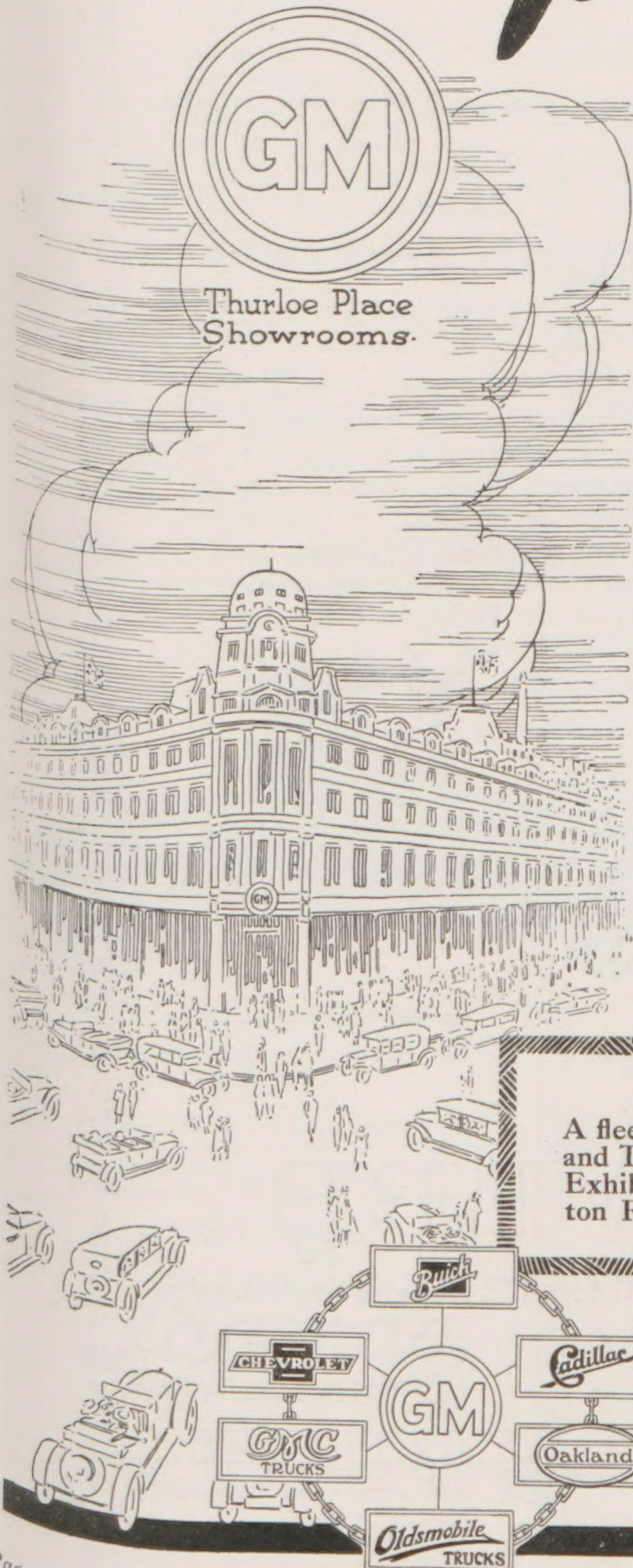
HOW TO GET TO THURLOE PLACE

A fleet of 'buses will be run by General Motors between Olympia and Thurloe Place every 20 minutes during the period of Olympia Exhibition. (Particulars at Stand No. 313.) Prior to that, Brompton Road tube station is the nearest point of public conveyance.

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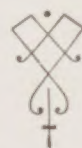


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(Regd. Design)

The "MOTOR-OWNER" MASCOT

THESE Mascots are vastly different from the ordinary ones of every-day commerce; they are hand chased and finished throughout, and have been pronounced by experts as works of art. Made solely by Mappin & Webb, in bright or oxidised nickel, or bronze, 7½ in. high **£6-6-0**



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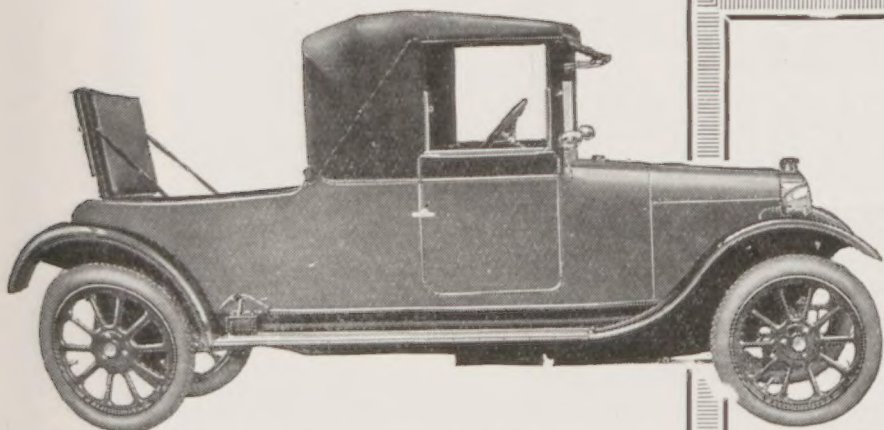
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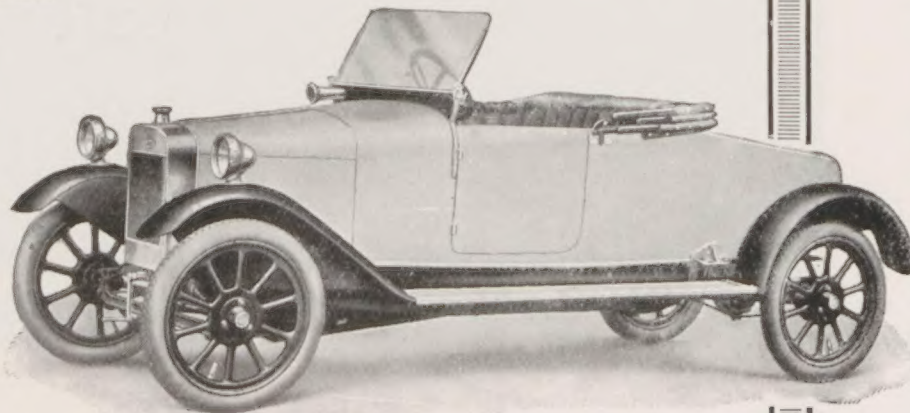
AGAIN AT STAND No. 243 OLYMPIA

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Open Two-seater
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Fitted with C.A.V. starting and lighting set, combined head and side lamps with dimmer switch, horn, clock, speedometer, one-man hood and side curtains, hood cover, spare wheel and tyre and tools.

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BY DIRECTION OF THE EXORS. OF THE LATE H. J. KING, ESQ.

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FOR SALE, THE EXCEPTIONALLY CHOICE RESIDENTIAL AND SPORTING ESTATE OF

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THE BEAUTIFUL JACOBEOAN HOUSE

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in extent, and providing EXCELLENT SHOOTING, FISHING AND HUNTING. The River Rib bounds the estate for about a mile. The house, park and home farm, about 553 ACRES, might be purchased separately.

Full particulars of the Sole Agents, Messrs. LOFTS & WARNER, 130, Mount Street, W.1; or HAMPTON & SONS, 20, St. James' Square, S.W.1.

By order of the Executrix of the
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About three miles from Slough Station, G.W.R. One mile from Stoke Poges Golf Course. Close to Burnham Beeches, five miles from Windsor Castle.

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The delightful pleasure grounds include Alpine rock garden, cascade brook and lily pools, rose gardens, two tennis courts, private cricket ground, walled kitchen garden, extensive orchard, excellent glasshouses.

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A STATELY HOME SEATED IN GRANDLY TIMBERED PARK.

IN SPLENDID ORDER. BUILT OF STONE AND DESIGNED IN THE TUDOR STYLE, RICHLY APPOINTED IN OAK, WITH MASSIVE OAK STRUCTURAL BEAMS. OAK CEILINGS. LINEN FOLD AND OTHER OAK PANELLING, POLISHED OAK FLOORS.

The accommodation includes lounge halls, five reception rooms, eighteen bed and dressing rooms, handsome panelled and galleried oak staircase, with open timber roof, ample offices, modern conveniences.



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Delightfully disposed grounds, with charming yet inexpensive gardens, studded with picturesque conifers and flowering trees and shrubs, ornamental water, terrace, tennis lawns, walled kitchen garden, orchards, heavily timbered park, valuable woodland.

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PRICE £5,000 FOR IMMEDIATE SALE.

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MODERN HOUSE

300 ft. above sea, facing south, with glorious land and sea views, and most beautiful gardens.

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Acetylene light, stabling and garage.

Broad terrace overlooking tennis lawns, fruit and kitchen garden.

Wooded dell with lawn and pool.

Azalea and rhododendron gardens.

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IT CONTAINS SOME WONDERFUL PANELLED ROOMS AND PARTICULARLY FINE STAIRCASE.

There are 3 Reception Rooms and Small Study, 11 Bed Rooms and 2 Bath Rooms.

EXCELLENT WATER SUPPLY. ELECTRIC LIGHT THROUGHOUT.

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Very pretty and well-timbered but inexpensive Grounds, Tennis Court, Flower Garden, Rock Garden, Pond and Wild Garden, Kitchen Garden, Pasture, and a little Woodland: about 20 ACRES in all.

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To be Let on Lease with 4,200 Acres of First-class Shooting

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with oak beams and panelling; beautiful decorations; eight bedrooms, two bathrooms, fine lounge and three reception rooms.

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Old-world gardens, delightful woods and meadowland; in all, nearly

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Splendidly built and appointed.

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Electric light, gas, telephone, Co.'s water.

Two garages, cottage.

Lovely old gardens of about **THREE ACRES.**

PRICE, FREEHOLD, £5,250

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In splendid decorative and structural condition; all modern improvements; electric light, gas, water, etc.; new bathrooms; large reception and billiard rooms, ten to twelve bedrooms; finely timbered grounds; good stables and garage; park-like meadowland and splendid buildings specially suitable for horses; lodge, cottages, etc.; in all, upwards of

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Rent £550 per annum, or the entire estate would be sold.

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Adjoining a lovely Common.

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Near High Wycombe, 600 ft. up, amidst most delightful country.

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Lounge hall and reception rooms, six good bedrooms, bathroom.

Excellent garage, stabling and outbuildings.

MAGNIFICENT OLD GROUNDS,
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High up, facing South, on gravel soil.

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Eight Bed, Bath, Three Reception. Extraordinarily pretty garden.

Stabling and Garage, Two Cottages, and Petrol Gas Lighting

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Easy Daily Reach.

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The paved courtyard entrance and verandah form a picturesque feature.

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A BARGAIN

BUCKS

27 MILES FROM LONDON.

560 FT. ABOVE SEA LEVEL.

ATTRACTIVE COUNTRY RESIDENCE

FOUR BEDROOMS.
COTTAGE.

BATHROOM.
OLD TITHE BARN.
CHARMING GROUNDS.

TWO RECEPTION ROOMS.
MODEL FARMBUILDINGS.

including tennis and other lawns, flower and kitchen gardens, ornamental walks, orchard, pasture: the whole extending to

22½ ACRES,

and forming a delightful and charming little property.

PRICE £4,500.

(11,031.)

AN ARCHITECTURAL GEM

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Within Two Hours of Town

A GENTLEMAN'S XVIIth CENTURY BLACK AND WHITE FARM RESIDENCE

7 Bedrooms, Bath, 3 Reception Rooms. A Great Wealth of Old Oak.

FARM BUILDINGS. COTTAGE. GARAGE. PASTURE. ARABLE. WOODLAND AND ORCHARDS.

In all 155 ACRES.

£3,750 FREEHOLD.

(14,053)

HAMPSHIRE

500 FT. ABOVE SEA LEVEL.

UNIQUE ESTATE,
including

CHARMING PERIOD RESIDENCE

Ten Bedrooms, Three Bathrooms, Three Antique Oak Panelled Reception and Billiard Rooms.

ELECTRIC LIGHT. CENTRAL HEATING. TELEPHONE.

UNIQUE GARDENS AND GROUNDS.

Stabling, Garage, Farmery, etc.

15 TO 700 ACRES, ACCORDING TO REQUIREMENTS.

A BARGAIN FOR IMMEDIATE SALE.

(11,367)

SUSSEX

600 ft. above sea level.

AN UNIQUE MANOR HOUSE

Thirteen bed and dressing rooms, three bathrooms, four reception rooms and GENUINE OLD OAK-BEAMED AND PANELLED TUDOR LOUNGE HALL of great antiquity.

ELECTRIC LIGHT. CENTRAL HEATING. TELEPHONE.

Two cottages, garage, stabling, farmery.

PLEASURE GROUNDS OF EXQUISITE BEAUTY: two tennis and other lawns, fruit, flower and kitchen gardens, several water features; woodlands and pasture extending to about

55 ACRES.

A LOW FIGURE FOR IMMEDIATE SALE.

(14,016)

PINE DISTRICT

10 MINUTES FROM TOWN.

BEAUTIFULLY APPOINTED COUNTRY HOUSE IN PERFECT ORDER.

Thirteen bedrooms. Very healthy situation.

BEAUTIFUL GROUNDS.

COTTAGES. STABLING. GARAGE.

ELECTRIC LIGHT AND ALL MODERN CONVENIENCES.

SEVEN ACRES.

(13,963)

MARLOW, BUCKS

CHARMING RIVERSIDE RESIDENCE.

EIGHT BEDROOMS, BATHROOM, THREE RECEPTION ROOMS.

ATTRACTIVE OLD-WORLD GARDENS. TENNIS COURT. STABLING.
GARAGE, LODGE.

COMPANIES' GAS AND WATER. TELEPHONE. ELECTRIC LIGHT.

In all,

3½ ACRES.

BARGAIN £5,500, FREEHOLD.

(13,933)

SURREY

10 MINUTES OF TOWN. HIGH GROUND

MODERN RESIDENCE OF CHARACTER

SEVEN BEDROOMS,
BATHROOM,
TWO RECEPTION ROOMS,
LOUNGE HALL.
GARAGE.



CHARMING AND DELIGHTFUL
WELL-TIMBERED GROUNDS.
TENNIS AND OTHER LAWNS.
HERBACEOUS BORDERS.
ROSE AND KITCHEN GARDENS.
WOODED WALKS.

Extensive uninterrupted views, In all,
THREE ACRES.

FOR SALE FREEHOLD.

(14,032)

MABBETT & EDGE, 127, MOUNT STREET, W.1

Telephone:
MAYFAIR 1289.

BATTAM & HEYWOOD

20, DAVIES ST., BERKELEY SQUARE, LONDON, W.1

AUCTIONEERS
SURVEYORS &
LAND AGENTS.

THE SHOW HOUSE OF THE ISLE OF WIGHT.

DELIGHTFUL MARINE RESIDENCE, STANDING IN TERRACED GROUNDS OF SIX AND A HALF ACRES,
LEADING TO THE SEA SHORE.

THREE RECEPTION ROOMS, BILLIARD ROOM, TWELVE BEDROOMS, THREE BATHROOMS. GARAGE FOR THREE CARS.
PRIVATE BOAT SLIP. COTTAGE. GARDENS OF UNSURPASSED BEAUTY HAVING FORMED THE SUBJECT OF
ARTICLES IN "GARDEN LIFE." TENNIS COURTS. CROQUET LAWN. ORCHARD, etc. GOLF 1 mile. HUNTING.

Exceptionally constructed and fitted. Every convenience.

£15,000 INCLUDING FITTINGS AND CERTAIN TAPESTRIES.

(OFFERS WANTED.)

(3060)

IDEAL FOR MOTORISTS SEEKING RURAL SURROUND- INGS WITHIN EASY ACCESS OF TOWN.

One of the finest of the Smaller Riverside Residences, one hour from Town, in the
most secluded and select reaches of the River Thames, and within view of Cliveden
Woods.

Three Communicating Reception Rooms, 20 ft. by 40 ft., 20 ft. by 30 ft., 22 ft. by 22 ft.;
Eight Bedrooms, five with lavatory basins (h. and c.); Three Bathrooms; excellent
Domestic Offices; Garage; Chauffeur's Lodge; Gardener's Cottage; Kitchen Garden.

Exceptionally beautiful Timbered Grounds on the Mainland, and in addition
LARGE ISLAND FACING RESIDENCE.

laid out as

PROBABLY THE MOST PERFECT PLEASURE GARDEN ON THE RIVER.

Tennis and Croquet Lawns.

Boat House.

Landing Stage.

Perfectly Equipped.

FREEHOLD COULD BE ACQUIRED FOR ABOUT £6,500.



Between WOKING & WEYBRIDGE.

PRICE REDUCED FROM £10,000 TO £6,000 FOR QUICK SALE.

Facing a Surrey Common 21 miles from London. Excellent train service.

A "VOISEY HOUSE" OF DISTINCTIVE DESIGN.

standing in secluded gardens on high ground facing South. On Gravel Soil.

Lounge Hall, 21 ft. by 18 ft. 6 in.; Three Reception, 25 ft. 6 in. by 21 ft., 21 ft. by 15 ft.,
18 ft. by 12 ft. 6 in.; Bath; Garage; Lodge; Three Acres Garden and Grounds.

Telephone. Electric Light. Main Drains. Company's Water.

St. George's Hill, New Zealand, Woking, Worplesdon Golf Courses all within easy
reach.

(1997)



WEYBRIDGE—A BARGAIN.

Close to St. George's Hill Tennis and Golf Clubs, and easy distance of Brooklands.

FAMILY MAN'S HOUSE.

THREE RECEPTION; TEN BEDROOMS; TWO BATHROOMS. SERVANTS' SITTING ROOM. SMALL TIMBERED GARDEN
TENNIS LAWN. GARAGE.

GAS. ELECTRIC LIGHT. COMPANY'S WATER. MAIN DRAINS. GRAVEL SOIL.

House stands back from road and is about ten minutes' walk of station with excellent train service.

£4,750 OR NEAR OFFER. Cost owner £7,000 two years ago.

NOTE.—A feature is exceptionally large, light, and airy rooms. To anyone with large family the place cannot be too strongly recommended.

(2679)

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AUCTIONEERS

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SURVEYORS
VALUERS

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Telephone: GERRARD 2727 (3 lines).

CONVENIENT FOR
LIVERPOOL, BIRKENHEAD, MANCHESTER, ETC.

THIS BEAUTIFUL PLACE.

Ready for IMMEDIATE OCCUPATION without any outlay.

To be LET, UNFURNISHED, on lease, with CAPITAL SHOOTING.

A luxuriously appointed modern residence, of exquisite design and delightful elevation, on high ground, and thoroughly up-to-date in all respects.

Central Heating, Electric Light, Telephone and Company's Water.

The skilfully planned accommodation, mostly on two floors, comprises about 20 bed and dressing-rooms, five bath-rooms, fine suite of reception rooms, spacious lounge and music saloon or billiard room, together with large garage, stabling, cottages, etc., etc.; exceptionally attractive pleasure grounds and kitchen gardens.

Additional land can be rented if desired.

Shooting over some 1,400 acres surrounding the House is a special feature.

Moderate rent on lease of seven or fourteen years, or the whole Estate producing a good rent roll might be sold.

Personally inspected and very strongly recommended by the executors' sole Agents: GODDARD AND SMITH, 22, King Street, St. James', S.W.1.



FOR SALE BY AUCTION, IN THE ESTATE AUCTION HALL, 22, KING ST., ST. JAMES', S.W.1. ON THURSDAY, OCTOBER 26TH, 1922, AT 2.30 P.M.

SURREY HILLS, WARLINGHAM

About $\frac{3}{4}$ mile from Upper Warlingham Station, $\frac{1}{2}$ mile from Warlingham Station, and 35-40 minutes' rail journey from Victoria, Cannon Street, and Charing Cross.

An exceedingly fine and superbly placed

FREEHOLD RESIDENTIAL PROPERTY

known as

"KOORINGA"

600 ft. above Sea Level, Southern Exposure, Magnificent Views.

Vestibule Entrance, Conservatory, Lounge, Inner Hall, Drawing Room, Study, Dining Room, Billiard Room, Handsome Polished Oak Ball or Music Room, Seven Bed Rooms, Two Bath Rooms and Compact Up-to-date Offices.

Electric Light, Gas, Telephone, Radiator Heating and Main Water Supply.

Capital Garage with Two Flats for Chauffeur and Gardener.

Picturesquely Timbered Grounds of a charmingly diversified character, most tastefully designed and inexpensive to maintain, tennis lawn, well-stocked kitchen garden and a variety of fruit trees, in all

ABOUT FOUR ACRES

Vacant Possession on Completion of Purchase.

Solicitors: MESSRS. SLOPER, POTTER AND GORDEN, Bank Chambers, 2, Putney Hill, S.W.15. Illustrated Particulars, with Sale Conditions, of the Auctioneers, GODDARD AND SMITH, 22, King Street, St. James', London, S.W.1. Telephone: GERRARD 2727 (three lines).



BY ORDER OF THE TRUSTEE IN BANKRUPTCY.

SCOTLAND (INVERNESS-SHIRE)

A few minutes' walk from Invergloyle Station on the Estate, 5 miles from Spean Bridge Station, and 14 miles from Fort William.

This magnificently placed

FREEHOLD HIGHLAND ESTATE

Amidst the finest Highland scenery and embracing about

1,650 ACRES

comprising

THE DELIGHTFUL MODERN RESIDENCE

On the Banks of and overlooking Loch Lochy, with Private Pierhead.

Lounge hall, 3 reception and billiard rooms, 17 bed and dressing rooms, 2 bath rooms and complete offices.

Stabling, Garage.

Two long carriage drives with lodges. Beautifully timbered gardens and grounds.

Trout Fishing for 4 $\frac{1}{2}$ miles in the River Gloy and also on the loch.

Grouse moor of 1,000 ACRES. Two Small Farms and excellent Sheep Pasturage.

In the main with Vacant Possession.

FOR SALE BY PRIVATE TREATY AT AN ABNORMAL BARGAIN PRICE FOR QUICK SALE.

Full Illustrated Particulars with Plan of the Agents, GODDARD AND SMITH, 22, King Street, St. James', S.W.1.

Further particulars of the above from GODDARD & SMITH, 22 King Street, St. James', S.W.1

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Grosvenor 1210
(two lines).

ALEX. H. TURNER & CO.

69, SOUTH AUDLEY STREET, W.1
AND AT GUILDFORD, WEYBRIDGE AND WOKING.

LAND & ESTATE
AGENTS.
SURVEYORS and
AUCTIONEERS.

BY DIRECTION OF TRUSTEES. EXCEPTIONALLY REASONABLE PRICE

NEAR LEITH HILL

Magnificent position.

600 ft. up.

THIS BEAUTIFULLY APPOINTED COUNTRY RESIDENCE
FOR SALE, FREEHOLD.

Fine panelled hall, four reception rooms, panelled billiard room, nine principal bedrooms, three dressing-rooms, day and night nurseries, six servants' bedrooms, two bathrooms.

Electric light. Central heating. Modern drainage. Excellent water supply. Telephone, etc. Two lodges. Stabling and garage.

Delightful Pleasure Grounds.

Two grass tennis courts, asphalt tennis court, rock and water garden, fruit and vegetable garden, etc., meadowland. Extending to about

42 ACRES IN ALL.

Plan and further particulars from MESSRS. ALEX. H. TURNER AND CO., as above.



Trout and Salmon Fishing, including One Mile in the Wye. Excellent Shooting.
About 1,070 Acres.

BRECONSHIRE, near BUILTH

THIS BEAUTIFULLY PLACED RESIDENCE TO BE SOLD.

On an ancient site, and containing three reception rooms, handsome oak-panelled billiard room, fifteen bed and dressing and two bath rooms.

Central heating. Electric light. Perfect drainage.

Stabling, Garage, Chauffeur's House, Laundry; Old Walled and other Gardens, Glasshouses, Orchard; Home and other Farms, with Farmhouses and Buildings.

About Two Miles of excellent Salmon and Trout Fishing from both banks of the River Orfon. Also One Mile of First-rate Fishing in the Wye with eleven Catches.

Probably the Best Shooting in the County.

Area in all, about 1,070 ACRES.

Sole Agents, ALEX. H. TURNER AND CO., 69, South Audley Street, W.1.



Beautifully positioned. About 300 ft. up.

On the Hills above HENLEY-ON-THAMES

15 minutes' motor journey from G.W. main line, and then only 45 minutes from Town by Express Service.

THE DELIGHTFUL SEVENTEENTH CENTURY GENTLEMAN'S
FARMHOUSE RESIDENCE.

known as

"CROSS HOUSE," KIDMORE, OXFORDSHIRE

Restored in perfect taste and full of old oak.



Panelled Hall and Lofty Beamed Lounge or Dining Hall, Drawing Room and Dining Room, Six Bedrooms (three with fitted lavatory basins), Two Bath Rooms. Excellent Offices; Company's water; Garage; Pretty Gardens; Tennis Lawn. Range of Farm Buildings and

3. 27 or 36 ACRES as desired.

For SALE by AUCTION (unless previously disposed of privately) on Wednesday, October 25th, at 2.30 p.m., at Winchester House, Old Broad Street, E.C.

Solicitors, MESSRS. CAPORN AND CAMPBELL, St. Bride's House, Salisbury Square, E.C.4.

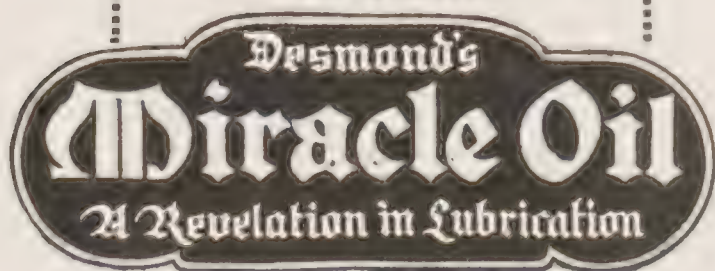
Auctioneers—MESSRS. ALEX. H. TURNER AND CO., 69, South Audley Street, W.1.



Supreme Throughout 1922

SUCCESSES 1922.....

Isle of Man T.T. Lightweight.
Winner and Record Lap.
Isle of Man T.T. Junior.
Winner and Record Lap.
Isle of Man T.T. Senior.
Winner and Record Lap.
Isle of Man T.T. (Cars). Junior and Senior.
Winners.
French Grand Prix (Motorcycles).
Winner.
Belgian Grand Prix (Motorcycles).
Winner.
Scottish Speed Championship (Motorcycles).
(St. Andrews, July 29).
9 firsts out of 10 races
on programme. Also
9 seconds and 10 thirds.
20) Miles Cyclecar Race. Brooklands.
3rd, 4th and 5th.
A.C.U. 6 Days' Reliability Trial.
70 Gold Medals out of
79 awarded.
Surbiton Motor Club. Sopwith Trial, Sept. 16.
All three Trophies, 7 Gold
Medals out of 13 awarded,
and 12 Silver Medals out
of 14 awarded.



For "Upper Lubrication."

HAS anything other than Miracle Oil ever acquired such an astounding list of successes to its credit in the course of a single season?

And — what is still more remarkable — what other product has ever met with such instantaneous success? Miracle Oil was placed on the British market for the first time early this year.

Why is Miracle Oil so much in demand among the men that *do things*?

Miracle Oil gives efficient "upper lubrication." Do not confuse it with petrol dopes. Get a 3/6 can (enough to treat 16 gallons of petrol or benzole) at your garage to-day and see for yourself.

THE CONCORD Co., Ltd., 18, Berners St., London, W.1.

Agents for Scotland
and Ireland:—



The Craigie Engin-
eering Co., Ltd.,
26, Elmbank Street,
Glasgow.

"When it's wheels—
say 'Sankey,' and
make sure of securing
the strongest motor
wheel in the world"



H.M. the King of Italy in his motor car fitted with

SANKEY WHEELS

Manufactured by

Joseph Sankey & Sons Ltd
Hadley Castle Works, Wellington, Shropshire

Telegrams: Sankey, Wellington, Shropshire

Telephone: Wellington, Shropshire 66



Look for
the nameplate
"Sankey Patent"
on every wheel



Arrol-Johnston



The
Saloon
Model
£750

PRICE REDUCTIONS

OWING to the remission throughout the automobile engineering industry of 16/6 from the operatives' war bonus, we are able to announce the following drastic reductions. Although the full cumulative effect of this cut is not yet operative, we have decided to give the public the immediate benefit of same.

Full particulars and local trial runs
on application to—
ARROL-JOHNSTON, Ltd.
Dumfries, Scotland.
London Dealers—
Leverett, Thorp & Kearton, Ltd.
122, New Bond Street, W.1

15.9 SALOON MODEL	-	-	£750
15.9 ALL-WEATHER MODEL	-	-	£695
15.9 OPEN TOURING MODEL	-	-	£550

OLYMPIA MOTOR SHOW Stand 268

Galloway
CARS

Galloway Cars are now made by
Arrol-Johnston, Ltd.
Prices have been reduced as follows :
10/20 COUPÉ - **£450**
10/20 4-SEATER **£350**
10/20 2-SEATER **£295**

OLYMPIA Stand 271
MOTOR SHOW



Overland

BRITISH-BUILT MODEL
ALL-WEATHER
TOURING CAR **£365**

1923 REDUCED PRICES—EFFECTIVE NOW

British-built Model Touring Car	-	-	-	£365
British-built Model 2-3 seater, with double dickey	-	-	-	£350
Three-quarter Landalette	-	-	-	£495
Standard Model Touring Car	-	-	-	£268
Sedan	-	-	-	£395

All prices ex works.

Write for descriptive literature and name of nearest Agent.

WILLYS OVERLAND CROSSLEY LTD.

British Factory and Sales Department
Showrooms
London Service Depot

Heaton Chapel, Manchester
151-3, Great Portland Street, London, W.1
111, Lots Road, King's Road, Chelsea, London, S.W.

The First Spot of Rain Heralds the Downpour

but ever-changing elements hold no discomforts for the owner of an Overland British-Built All-Weather Touring Car. Within a few seconds of the warning the car is changed from an Open Touring to a completely enclosed one, and its passengers travel in comfort even in the worst weather.

The upholstery is in real leather, and an Auster Wind Screen and C.A.V. Lamps are fitted.

The whole car is completely equipped and fitted with the famous Fisk Tyres.

Early delivery and definite dates may be had from any Overland Agent.



Give me Mobiloil!

ONE WAY TO SAVE MONEY

PERHAPS you have never looked at your oil account in just this way:

Correct oil is not an expense—it is a saving. Oil is the one motoring necessity you buy that has a direct effect on the entire operating cost of your car.

Good tyres wear longer ; good fuel gives greater mileage. But they are both straightforward expenses. They have no direct effect on the other operating expenses of your car.

Correct lubrication is conservation—the prevention of wear, the saving of undue expense, the lengthening of the life of your car.

Gargoyle Mobiloil is manufactured from selected crudes by processes designed to bring out the highest lubricating value. With Gargoyle Mobiloil—the right grade for your car—in use, correct lubrication is assured.

The Chart of Recommendations exhibited at all garages is the guide to correct lubrication. Refer to it for the grade of Gargoyle Mobiloil recommended for your car. Act on the Chart's advice and save money.

Gargoyle Mobiloil is sold by dealers everywhere.

VACUUM OIL COMPANY, Ltd.
CAXTON HOUSE, WESTMINSTER, LONDON

S.W.1

Telegrams : "Vacuum, Phone, London."

Telephone : Victoria 6620 (7 lines)



Mobiloil

Make the chart your guide



The motor owner
whose car is "Exide"
equipped is never
short of power—to
start, to light, or to
ignite.



More power than
you are likely to
need delivered with
unfailing reliability,
accounts for "Exide"
superiority.

STAND No. 406
Olympia
November 3—11
1922

THE Chloride ELECTRICAL STORAGE
COMPANY LIMITED
CLIFTON JUNCTION, MANCHESTER

Power
the outstanding
feature of
Exide
performance

210-221 SHAFTESBURY AVE. LONDON, W.C.2
58 DALE END, BIRMINGHAM

THE MOTOR - OWNER

OCTOBER
1 9 2 2



VOL. IV
NO. 41

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The Editorial and Publishing Offices are at 10, Henrietta Street, Covent Garden, W.C.2.
Telephone No., Gerrard 2377 (3 lines). Telegraphic Address, "Peripubco, Rand, London."
Annual Subscription, payable in advance and postage free :
Great Britain and Canada 15s. Abroad 20s.
Subscriptions should be directed to the Publisher at the above address.

The Editor will be pleased to consider contributions of special interest to the car owner, provided they are of high quality and in every way suitable to the magazine. Short illustrated articles are preferred, dealing with any aspect of private motoring, either as regards touring or the home management of the car. First-class snapshots of roadside scenes or incidents are particularly desired. All photographs and sketches should be fully titled on the backs and bear the name and address of the sender.

Contributions should be addressed to the Editor of "The Motor-Owner," 10, Henrietta Street, W.C.2, and should be accompanied by a stamped, addressed envelope. While every effort will be made to return them if unsuitable, the Editor cannot hold himself responsible in case of loss or damage.

AS BYRON SAYS:

"A PRETTY WOMAN IS A WELCOME GUEST."

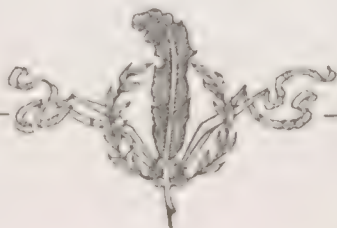


Mrs. Cyril Cubitt, daughter of the late Major E. Barrington Croke, and a sister of Lady Montagu of Beaulieu. She married the only son of Count and Countess Riccardi-Cubitt, of Eden Hall, Edenbridge, Kent, in 1919. Photo by Miss Compton Collier.

WHEN IS A MOTORIST DRUNK?

AFTER DUE REFLECTION.

"The Motor-Owner" considers Passing Events with an Open Mind.



DRUNK OR UNNERVED?

WE have very decided views on the question of drunken people driving any species of motor vehicle. Such an offence—when incontrovertibly proved—should be punished with the utmost rigour of the law. An entirely different situation arises when a man who has happened to have a whisky and soda—sufficient to make his breath indicate the fact, but otherwise perfectly sober—has the mischance to become involved in an accident. There have been one or two very unsavoury cases recently of this character. So serious has been the evidence to support sobriety, that the lawyers handling the case have approached us to take further steps. That, of course, is not our province, and there are adequate legal means for dealing with any specific miscarriage of justice.

But with the general principle we are emphatically concerned. An average person, after a serious accident, would be shaky of hand and quite reasonably so upset as to be, or appear, somewhat incoherent. If that same person had previously had a whisky and soda, the breath would indicate the fact. An indignant constable—a constable is very human, and if someone has been hurt his sympathy naturally goes to the sufferer—might quite conceivably misread such signs for drunkenness.

To be charged with drunkenness when driving a motor vehicle, is a very heinous offence. If definitely proved, it should be punished with the utmost severity. *But there should not be one iota of doubt or possible doubt as to the medical evidence.*

We therefore submit to the Home Secretary that in all cases of alleged drunkenness an independent doctor should be called in to supplement the evidence of the divisional surgeon—or differ from it as the case may be. We trust that our attitude is made perfectly clear—on both sides. The subject demands the early attention of the Home Office.

AN INNOVATION.

Hitherto it has been impossible for THE MOTOR-OWNER to spare much space for the smaller types of accessories. We refer primarily, of course, to our Editorial pages, but a similar lack of space has largely governed the same problem in our advertising pages.

A way out of the difficulty has now been discovered—and, once discovered, is naturally as simple as the proverbial A.B.C. With this issue we present a Supplement dealing solely with accessories. We venture to claim that it is artistically produced, and worthy of that treatment for which we intend it—namely, that you should put it by in a drawer of your desk for such times as you want to refer to it.

But there is a more important aspect of this Accessory Supplement. It is neither our desire nor objective to criticise the behaviour of other periodicals or newspapers. None the less, there is a blunt fact which obtains generally, but which does NOT obtain in regard to the MOTOR-OWNER ACCESSORY SUPPLEMENT. The accessory field offers readily taken opportunity for advertising gadgets and fittings which—to put it mildly—are certainly not worth purchasing.

Frankly, admitting that the attitude adopted is rendered easier by the comparatively small amount of space we are able to allot to such announcements, we have taken a definite stand against this dubious practice. So far as the actual appearing of an advertising announcement in the Accessory Supplement is concerned, the power of veto rests with the Editor, and will do so in all such supplements which may be published in the future. In a phrase, only genuine advertisements, offering articles which may safely be purchased by the public, are accepted in the MOTOR-OWNER ACCESSORY SUPPLEMENTS. A fitment which claims the usual 30 per cent. saving in petrol, with, as every expert knows, no earthly possibility of doing anything of the sort, will not be found advertised in these Supplements.

THE COMING SHOW.

The coming White City-Olympia Show is going to be a notably interesting one. In fact, it is rather more than likely that it will be one of the most important functions of its type in our history. There will be a good sprinkling of novelty alike in complete models and minor details. That novelty, however, is not dictated by the mere whim of novelty as such. It is governed by the hard dictates of the commercial requirements of the present day. We shall have a number of new models of about 8 h.p., and right worthy little productions they are. Then we shall have the 11.9 h.p. type well in evidence, and another note of novelty will be found to obtain in the 14 h.p. type of inexpensive family car. So far as new designs are concerned, the keynote of the situation lies in the 8 h.p. class and the 14 h.p. type of family man's car.

But there is a much more important aspect of the general situation than this. We refer to the question of prices. Motoring next year is to be very much cheaper, a fact which we acclaim with the utmost satisfaction. With regard to purchase prices, remarkable reductions have been made all round, and British manufacturers are certainly not behind-hand in this respect. We offer them our hearty congratulations on the splendid efforts they have made in this direction, and would particularly draw your attention to the fact that in no single case have we discovered any reduction in quality accompanying these lower prices. On the contrary, quality is frequently improved and road performance made even superior to previous standards.

But it is not only in regard to purchase prices that motoring is going to be much cheaper next year. The valuable reductions recently made by petrol and tyre companies will go far towards that further development of the industry which we believe to lie in the lap of the immediate future.

YOUR HAT OFF TO THE BRITISH MANUFACTURER—PLEASE!

LOOKING ROUND THE ARENA.

By Captain E. de Normanville.

Attention is drawn to a very important point in this article. When the curtain is lifted on the coming Motor Show, it will be seen that the British manufacturer has made remarkable strides on the value for money basis.

THIS is the period of the year when all the world automobile is agog with excitement. And quite right, too! Is not the Show of Shows already dimly looming on the horizon? Is not our annual feast of motor delights almost within our grasp? What are we going to have at that great banquet of novelty and improvement? Elsewhere in this issue my good friend Owen John Llewellyn "Lifts the Curtain" for you—and I am given to understand that I must not do any of the curtain-lifting business which treads on his preserves! Methinks he is a jealous-minded varlet! But needs must when Owen John drives; so, prithee, listen whilst I raise my own little curtain on some aspects of the Show situation which are not his preserves.

The point with which I wish to deal is the question of prices—a most important subject, as you will readily agree. By the laws of the Medes and Persians, that is to say, the Society of Motor Manufacturers and Traders, price reductions not made public before the 16th of October cannot be announced until after the Show. Consequently it is no use looking for any more than we have already had—which is point number one. That, to my way of thinking, is a thoroughly sound provision, alike in the interests of the public and the trade. One is tempted to wonder whether it is practicable to extend the idea, and, if practicable, whether such an extension would be advantageous. You see the way the trade handled their price reductions this year was neither helpful to them nor to the public. We had a veritable avalanche of price reductions announced much sooner than usual, and the public (quite naturally) thought they were only an *apéritif* for further reductions at the Show period proper. The result of that, of course, was to cause an unnecessary measure of trade stagnation, as most people refrained from buying in the hope of further price reductions.

Alike from the point of view of the

public and the trade we want to get away from this "seasonal" business in motoring matters as quickly as we can. They have very much less of it in the States—greatly to everyone's advantage. From your own point of view, you may possess a car which is intrinsically worth £500 of anybody's motoring money, yet because it is labelled a 1921 model you can get only £350 for it in 1923, even if it has done only, say, 7,000 miles and is still in excellent condition. This ridiculous "seasonal" idea materially adds to the depreciation value of a car a year old, which diminishes the likelihood of the owner purchasing a new car—and, consequently limits trade.

The effect of "jumpy" price conditions is precisely the same. It unsettles the public mind and tempts intending purchasers to hold back. I think, however, that you may safely take it that the existing price situation is well stabilised for some time to come—at any rate for the next season. My chief fear is that some of the prices now current cannot be maintained under existing conditions with economic practicability, and that, therefore, in certain cases we must either look for an increase—or else a demise!

Many of the values now offered are really remarkable and, with the bigger firms, may be safely assumed as stable. They are in some cases materially better values than the pre-war article. We "pen-pushers" are prone to criticise the British manufacturer on the question of prices by comparison with foreign manufacturers. But this time I frankly take off my hat to some of our leading British manufacturers. Take the goods offered on the only sane basis, that of intrinsic value for money expended, and they will compare favourably with anything produced by anyone else in the world. Do not forget that "intrinsic value" does not terminate with the date of purchase. You have—alike in equity and your own interests—to consider the value you will possess at the end of six months, a year, or even two years.

You don't buy a British motor car as a plaything for three months. You must consider the chassis value and the state of the coachwork after a year's reasonable usage. Do so with some of our leading British cars, and see how well they will stand this comparison with anything else. Take the new four-cylinder 12/14 h.p. Crossley as an outstanding example. If you can find me better value in a really high-grade medium-priced product, you know more about my job than I do myself.

And there are many others in various types—your Albert, Angus-Sanderson, Armstrong-Siddeley, Austin, Bean, Humber, Rover, Swift, the new Vauxhalls and Wolseleys, and so on, just to mention a few that come to mind haphazardly, and not including our accepted super-cars, with which there is nothing to make a comparison.

I want to bring this point home to you very thoroughly. By hook or by crook—it matters not an iota which—the British manufacturer will, at the coming Show, offer really remarkable value for money—muchly improved upon anything that has so far proved possible in the post-war period. That is a most important fact and one which you should take the opportunity of proving to your own satisfaction when you go to the Show.

I have a most wholesome appreciation of the remarkably good value for money propositions which are imported into this country. I am also wholly delighted to see that the British manufacturer has made excellent progress this year in the value for money he is offering.

For reasons which need not be entered into here, it will never be possible for the British manufacturer to compete on a "price alone" basis with the American producer. He can, however, compete on the value for money basis, and the prices now announced constitute a remarkable step forward in that direction, and coupled with the reduction in running costs should do much to stimulate motoring development in this country.

OH, TO BE IN CANNES NOW!



Driven away from Northern lands by fogs, frost and snow, the motorist can find no more suitable spot to establish his winter quarters than this most charming and sunny resort on the Côte d'Azur: Sunset on the Esterel viewed from La Croisette.

Cannes, the Pearl of the Riviera, "discovered" in the year 1834 by Lord Brougham, when en route for Italy, in an old-fashioned "diligence," has grown up an ideal centre for the tourist and sportsman. Beautifully situated in the middle of the Côte d'Azur, Cannes is the pivot of a complete radiation of roads, the perfect building of which enables the motorist to enjoy with the utmost security the surrounding picturesque scenery.



A splendid view of the promenade "de la Croisette."

The tourist will have no difficulty in choosing comfortable accommodation at reasonable prices. Several up-to-date garages are to be found in the town with large stocks of petrol and motor accessories, and the R.A.C. and the Automobile Association are both locally represented.

A whole volume would not be sufficient to describe this enchanting corner of France, of which a king remarked on one occasion: "Truly a Paradise on Earth."

WHAT THE RACING CRACKS THINK.

The suggestion put forward in the last issue of THE MOTOR-OWNER for altering Brooklands Track for more spectacular and useful races for one to three litre road-racing cars has created an extraordinary amount of interest. We offer a selection of the opinions expressed.

A BROAD outlook on the whole question is taken by Mr. M. C. Park, who welcomes the idea openly.

SIR,—I think the suggested alteration to Brooklands as outlined in THE MOTOR-OWNER is a most excellent idea. There is no doubt racing at Brooklands in the present way does not constitute a complete test for a car or driver. Speed is practically the only aim; which is, after all, a very small part of an owner's requirements.

I cannot see that the suggested alteration would increase the element of danger to any noticeable extent, and, with safe cars and drivers, the alteration would probably reduce the danger, especially in long races such as the 200 miles race.

Sand-bag parapets would be a sound way of imposing the correct course on all competitors. This work would be most important. In my opinion the strength and lay-out should be such that a driver would be offered no alternative to the proper course.

I consider passing should be allowed anywhere. Under such conditions, racing at Brooklands would demand practically all the qualities from both cars and drivers as are called for in a road race.

Personally I should be very pleased indeed to race under such conditions.

M. C. PARK (Vauxhall).
(3,000 cc. Champion 1922.)

Greater interest and utility—and a desire to take part—are the views of Mr. F. C. Clement, whose Bentley three-litre exploits are well known.

SIR,—With reference to improving Brooklands from a spectacular point of view, as put forward in the last issue of THE MOTOR-OWNER, I would like to say that I think the suggestion quite a sound one, as the average race meeting at Brooklands now is indescribably dull from the non-technical onlooker's point of view.

Speaking from the technical side of the question, whilst the races as at

present run are principally a test of the engine, the modified form of race, as suggested in your columns, would test not only the engine but transmission and steering—in fact, every part of the car; and from the driver's point of view, the inclusion of the various bends would make the race much more interesting. Personally I would drive with the greatest of pleasure on this form of track.

From the above remarks you will see that I am heartily in agreement with the views expressed.

F. C. CLEMENT.

As usually the case, Mr. S. F. Edge sums up the proposition in a clear-sighted manner.

SIR,—I have read your remarks and Mr. John Pugh's suggestion in regard to making Brooklands long distance races more attractive to the ordinary onlooker.

I see not the slightest objection to the scheme, and I concur in desiring that a race run on the lines suggested should be tried.

The more advantage that can be taken of Brooklands track for testing motor cars in every possible way, the better for the British industry.

S. F. EDGE (A.C.).

Mr. Frazer Nash has one or two practical suggestions to offer. The points he raises could be readily covered.

SIR,—I have read with interest, in the September issue of THE MOTOR-OWNER, the suggestion therein put forward to brighten Brooklands. The idea of interposing hazards somewhat similar to those experienced in a road race is good and should certainly provide interest besides testing out many parts of the car which at the present time escape testing on Brooklands. Nevertheless, I do feel that there would be a fair element of danger in the idea. For one thing, if the entries were at all numerous there would be many more

cars per length of track than usually obtains in any road race, where the length of the circuit may be anything from ten to fifty miles.

Secondly, there is the well-known peculiarity of Brooklands that speeds are very deceptive, and whilst 40 m.p.h. feels fairly fast when approaching a corner in a road race, it seems to be almost a walking pace after completing a lap at, say, 80 m.p.h. or more.

So far as I am concerned I should be rather interested to compete in a race of this nature, although to a certain extent it would give the G.N. what might be considered an undue advantage, as, owing to its low centre of gravity, rapid acceleration, and easy dog clutch gear change, the G.N. could make better use of a course of this nature than plain lapping round the track at speed.

It will be very interesting to hear other people's views on this subject, and I look forward to them with interest.

A. FRAZER NASH.
1,100 c.c. Champion, 1922.

Mr. B. S. Marshall is all in favour, and even subconsciously thought it a good idea!

SIR,—I consider the idea very good indeed, and think that it would provide a great deal more interest and make a greater appeal to the car and driver.

Curiously enough, I was sitting at the same lunch-table as Mr. John Pugh on the day of the 200 Miles Race, when this matter was discussed with your representative, and, although I was thinking about something else at the time, I nevertheless thought that it was a jolly good idea, and worth at least a trial.

BERTRAM S. MARSHALL.

Mr. Malcolm Campbell has one or two useful points to make. Races as advocated would, of course, be confined to suitable cars—the idea is

AND WHAT DO YOU THINK ABOUT IT?

impracticable for the Big Benz or the 450 h.p. Sunbeam!

SIR,—With reference to the suggestions put forward in THE MOTOR-OWNER for a "brighter Brooklands," I must say that I think this suggestion is extremely good, and it would certainly provide a variety if something of this sort were arranged.

The only drawback, to my mind, if these suggestions were put into effect would be that the ordinary cars which one sees at Brooklands would be unsuitable, as the cars that would win these races would be those fitted with highly efficient front wheel brakes and engines capable of extraordinary acceleration. I could name dozens of cars which have performed most consistently and highly creditably during the past season, which would be unable to take part in races of the description suggested, such as the Isotta Fraschini, the big Benz, the 12-cylinder Sunbeam, and others of this class. In other words, the cars suitable for races of this kind would be those built for International Road Races, and, therefore, the entries would be very limited.

Again, a great deal depends on what the spectators are out for—whether to see skilful driving, as suggested, or really high speeds, such as have been frequently seen at Brooklands this year.

Taking these points into consideration, I do not think that the track could be converted for the ordinary Brooklands meetings; but if the 200 Miles or 500 Miles races could be run on these lines I am of opinion that it would prove an enormous success.

M. CAMPBELL.

Mr. A. J. Miller begs to differ, though we are unable to see eye to eye with him—except in his last paragraph, where we are all in favour!

SIR,—Regarding the suggestion to brighten Brooklands, my honest opinion in this matter is that Brook-

lands is quite unsuitable for such a race, primarily because the surface of the track is very rough, and there would be no chance of skidding round the corners. At the suggested corners there would be a complete lack of camber as on the roadway. I think that cars coming up to a corner fast on the present Brooklands surface would be apt to drag the tyres off, and to skid round corners as invariably happens on the Isle of Man and Grand Prix courses would be very doubtful.

Brooklands track is an invaluable testing ground for engines, but I cannot think that it is in any way suitable for such as Mr. Pugh's suggestion, which to my mind would be more in the form of a gymkhana.

In conclusion, I do wish that some enterprising motoring community would attempt to organise an English Grand Prix, which I feel sure would be very well accepted by the English manufacturers and the public.

A. J. MILLER.

Very short, equally sweet, and even more practical is the letterette of Mr. H. W. Cook.

SIR,—I think that if the proposition is confined to road-racing cars up to 3,000 c.c., it should prove quite interesting.

H. W. COOK.

Another willing entrant and keen supporter is found in the person of Mr. A. Noble.

SIR,—I think that the suggestion in your current issue is an excellent one which should do much towards brightening Brooklands, from a spectator's point of view and, incidentally, from a driver's point of view, for I know of no more monotonous ride than a long-distance race or record on the track as laid out at present. A race such as you suggest would do much towards improving the "breed" of light motor cars, and I for one would certainly enter and drive a "Crouch" sports model in any event of this kind which you promote.

A. NOBLE (Crouch).

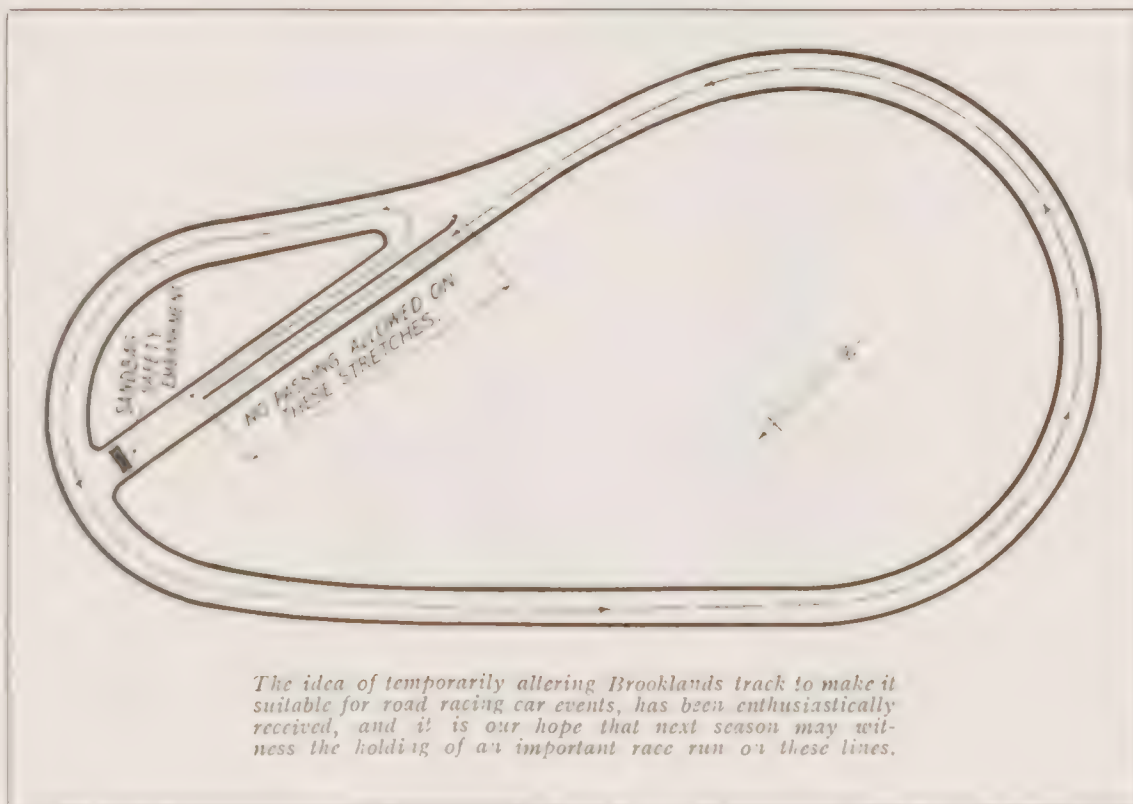
From the Brooklands point of view we are inclined to agree with the views of that famous sportsman, Mr. Denis Shipwright.

SIR,—The suggestion put forward, if carried into effect, would double the interest of Brooklands racing, and probably double the attendance too. It would test driving qualities to the utmost, and in addition to braking, changing gear, acceleration, it would introduce into Brooklands racing all the thrills of road racing, with the prizes more deserved than they are to-day. My humble opinion is that it is more than practicable—it is what must be introduced to Brooklands racing. I cannot pass an opinion on cars with freak gear ratios, or those that cannot do less than 60 m.p.h. in first; they may have to remain in the paddock to demonstrate their bursts of speed. I congratulate

THE MOTOR-OWNER on their initiative in offering a handsome cup for such a race, and, as the owner of a private racing car, with excellent four wheel brakes and an exceedingly strong chassis, I should be only too pleased to participate.

DENIS
SHIPWRIGHT.

[The Editor regrets that further space cannot be allotted to this enthralling subject, but further pages of opinions will appear in the next issue of the MOTOR-OWNER.]



The idea of temporarily altering Brooklands track to make it suitable for road racing car events, has been enthusiastically received, and it is our hope that next season may witness the holding of an important race run on these lines.

IT WOULD BE SOME SHOW!

DO YOU LIKE NIGHTMARES? HERE'S ONE!

Possibly we should offer you a preliminary apology for this article. It emanates from the padded room of one of our more select private asylums, where our Mad contributor is—we hope—slowly recovering from a severe attack of Showitis. Yet we do not offer such an apology, as the delightful humour is ample excuse—or so we think!

DURING the last month I have been collecting the earliest possible misinformation regarding the forthcoming Motor Show. It has been an extraordinarily interesting experience this year, for the air seems to be full of sensational rumours based upon absolutely incontrovertible inaccuracy, and the conscientious writer therefore finds himself in a difficult position. If he should decide to ignore rumours regarding some of the most ingenious novelties of the year his copy would be dull when compared with that of more enterprising journalists who argue that the public should not be deprived of interesting news merely because it isn't true. After this explanation I may proceed with confidence to give a

FORECAST OF THE SHOW,

and I can assure my readers that I have taken no pains whatever to check the statements upon which my prophecies are based. If they are correct, this is what we may expect:—

Upon entering the vast hall we shall first notice the absence of the crowds to which we have become accustomed. The long, brightly lit aisles will be almost depopulated. The youthful and beautifully upholstered demonstrators will be waiting on their stands ready to explain to chance visitors the notable exhibits of the year.

A magnificent attendant at the entrance will regard us with scorn. We shall note that he is a grandly proportioned King Beaver attired in what appears to be the uniform of a Czecho-Bulgrecian Field-Marshal, and he will explain to us with dignity that the absence of visitors is due to the fact that this is "a cheap day."

He will further inform us that, as the ten shilling days have in the

past proved so successful in attracting the vast masses who wish to avoid the crowds, the authorities have decided this year to have Ten Guinea Days, and that it is on these that the really smart people will attend. Feeling rather snubbed and depressed by finding ourselves out of the fashion, we pass along the lonely avenues, but our first feelings of sadness change to wondering admiration as we note some of the outstanding features of the Show.

On one of the first stands we visit we see a beautifully tailored exhibitor, who may be described as a modern

Beau Nash. He is showing a lady visitor the latest G.N. light car, fitted with a 16-cylinder aero engine of 750 h.p. It has a two-seater body with four rows of very dickey seats to accommodate eight children—or the luggage of one lady passenger.

"It's charming," the prospective purchaser is saying. "But think of the tax! On seven hundred and fifty horse-power I should have to pay several times the cost of the car every year."

"Ah! my dear madam," we hear the modern Beau Nash reply, "that is the very point I was about to mention.

We realised, of course, that the somewhat high horse-power of our new model might be regarded as a disadvantage, so we redesigned the engine. We have entirely eliminated the bore!"

"Eliminated the bore?"

"Exactly, my dear madam. You know, of course, that, according to the absurd system of rating the power of cars, only the bore of the cylinders is taken into consideration. It was this fact that gave us our opportunity. At a single stroke we abandoned the bore—ha, ha!"

Noting with disappointment that the lady does not smile, he continues: "If you examine this simple diagram you will see that the parts usually described as cylinders have solid centres. We call them solinders. Combustion takes place in the jacket, which in the common type of engine contains water. What I may term the solid bore merely absorbs heat from the outer combustion jacket, and for that reason we call the engine the "iron cooled" type. The thermal efficiency of the gas—"

"I know all about gas and therms," says the lady severely, "and I simply will not have a car which uses gas. My bill last quarter was simply outrageous!"



We shall note that he is a grandly proportioned King Beaver attired in what appears to be the uniform of a Czecho-Bulgrecian Field-Marshal.

A COMPLETE REVOLUTION IN TYRES—PERHAPS!

"A slight confusion of terms—I mean terms, madam—" begins the suave demonstrator, but the lady passes on to the next stand, where a young nobleman whose trousers are beautifully creased, and whose shirt is jewelled in every hole, is explaining to a number of well-dressed women the advantages of a Boudoir car the price of which has been reduced to £2,019 2s. 3d. for 1923. Through the plate-glass windows of this fairy coach we gaze into a softly lighted interior with panels of tortoise-shell inlaid with platinum and gold. On a silken divan reclines an exquisitely gowned girl who appears almost too lovely to be true.

We might linger at this exhibit were she alone, but a brunette on the next stand smiles on us and invites our inspection of a new every-weather body. We assent, but it appears that the brunette is merely a lure, for, as soon as she has gained our interest, she introduces a hard-featured man with an unpleasantly businesslike manner.

"This beautiful product of engineering skill," he says, "has been specially designed for use during the summer months in Britain. You will notice that it has four lightning conductors insulated by a patent process from the hurricane hood, which is scaled with asbestos tiles impervious alike to heat or hail. You will see that the new patent silent dumb-irons have an extension which forms a snow-plough, and that beneath the car are floats which render the vehicle buoyant on flooded roads. If you will kindly glance within the rain-proof body you will find that we have placed just in front of the passengers' seats a small geyser which supplies hot soups and other restoratives. The small reversing lever on the geyser actuates a thermostat, which causes the apparatus to issue ices or cooling drinks when required. The switchboard is connected with the wireless signalling device for use in foggy weather, and the sun-shades on the venetian blind principle—"

But our attention has wandered to a beautiful blonde demonstrator who looks like the cover of a magazine. She is handing out pamphlets bearing words somewhat as follows:

THE SENSATION OF THE SHOW.

WHY USE ENGINES?

WHY PAY TAXES?

SEE THE NEW AUTO-GLIDER CAR.

THE MOTORLESS AUTOMOBILE.

"Good afternoon, sir," says a person who appears from a little funk-hole situated at the back of the stand, and furnished as to one hand with a type-writer and as to the other with a syphon. "You are interested in our new motorless car? A wonderful invention, sir, and one which will revolutionise the trade. . . . On the same principle as the aerial gliders which travel faster and farther when the engines are removed than when hampered by their weight. . . . Amazing? Yes, but true. . . . the result of a costly experiment made by a client of ours who owned one of our now obsolete 20 h.p. D.U.D. sporting models. Interesting story! One that will make history. Sent his engine to us to be repaired, as some minor part (not made by our firm, of course)

failed. Used his car as a glider. Brilliant success. Found that it ran better without the engine than with it. Beat all speed records down Kirkstone Pass at first attempt. The speedometer needle made three laps round the dial before bursting. Estimated speed 250 to 300 m.p.h. Momentum sufficient to cause the car to travel across England and part of the battlefields of France if it had not been checked by Lake Windermere. Reported by the newspapers as an accident. Actually the beginning of a new epoch in motoring—the age of the auto-glider. No more engines; no more taxes on horse-power. Rated by brake-power necessary to check speed. The model you see on the stand is rated at *minus* 19.6 h.p., which means that the Government pays the owner £20 per annum. Fact, sir. Ask your Member. Government worried, but helpless. Greatest invention since—"

We seek refreshment in the tea-rooms, where queues of neat waitresses advance to attend their first customer.

The atmosphere of the place seems horribly unreal until a well-known tyre manufacturer enters accompanied by a member of the Press.

Fragments of their conversation drift across the empty room:—

"... Auto-vacuum tyre . . . entirely new principle . . . more efficient after every puncture . . . out-Rapsons Rapson! . . . if air leaks in through the patent porous tube trouble may be cured by stabbing with small dagger supplied free of charge . . . normally, air expelled automatically . . . car insulated by vacuum which cannot transmit shocks . . . guaranteed for ten thousand miles before they need a puncture to make them as good as new . . ."

Again we escape and ascend by a lift to the galleries, where we are shown the new gearbox emollient grease which cleanses the hands and improves the texture of the skin; the Thyroid Gland carburetter which gives new life to old cars, and the latest . . .

But to reveal more secrets of the coming Show is inadvisable. The cautious prophet should not run the risk of being doubted, so that the present moment is suitable for my finale!



"The tax, madam? That is the very point I'm coming to. There is no tax. We have entirely eliminated the bore!"

GRACEFUL OF LINE AND SUAVE IN MOTION.

A PLEASING LINED SPORTS MODEL.

A good sports model, living up to the reputation of its name, but also embodying the ease of control of an ordinary touring car, represents a happy combination. Such is the new A.C. model.

THE excellence which follows upon a blend composed of equal parts of beauty and usefulness is exemplified when the merits of the sports model A.C. come under consideration, for beauty and utility run side by side in its construction. Its fine, clean-cut lines, polished aluminium body and well-finished V-shaped wind-screen all tend to make it one of the prettiest light cars on the road.

When we come to consider the points of utility we are much impressed with the clever and novel method of stowing the hood away behind the squab back of the seat, where there is also found a locker for luggage and a neat tool chest.

The large steering-wheel gives a feeling of safety, and the car answers immediately to the slightest movement. A C.A.V. starter is fitted, and this, coupled with an air-shutter fitted to the dash, makes starting an easy matter in any temperature.

Within easy reach of the right hand an ignition control is fitted, while a push-button for the electric horn is conveniently situated on the side of the car. The starter-knob is operated by the right foot, leaving the hands free to regulate the ignition and air-shutter. The dashboard is more or less complete with instruments, a revolution-counter being included.

Then, again, although the car is only avowedly built for two—accommodation ideal for man and maid—yet the sports model A.C. might be described as the “small family car,” there being ample room for two grown-ups and a child.

Family interest brings us face to face with the necessity for economy in fuel consumption in the present state of the money market, and here the car under discussion scores beyond all doubt. It will run all day at 34 to 40 m.p.h. to the gallon of benzole mixture, which we used throughout the trial.

Rated at 11.8 h.p., the tax is £12. There is one small point in the car which, in our opinion, might be improved on. The position of the hood when raised makes entering or leaving the car rather difficult.

We come now to travel conditions, and here we can give the sports model A.C. almost unqualified praise.

The car will run at 40 m.p.h. without the slightest engine fuss, and, if necessary, exceed the 55 m.p.h. mark, a speed quite fast enough for our winding roads. At the former speed the exhaust is not at all noisy, and when “all out” it gives quite a pleasant note.

The car holds the road remarkably well, taking most hills on top, whilst cornering at speed has no terrors. This is undoubtedly due to its quarter

elliptical springing, efficiency being increased by a strong binding of tape. The foot-brake is very effective and smooth in action, while the hand-brake is extremely powerful, and a third one, acting direct on to the transmission, can be used in case of emergency. There are three speeds and reverse, but the drop from top to second seems to us to be just a little too much. Many test hills could have been climbed much faster if the “second” had been slightly higher.

We were much pleased with the special attention paid to the 4-cylinder engine of the model under discussion. With a bore and stroke of 60 mm. by 100 mm., it is full of good points: for instance, the sporting owner will appreciate the detachable head to the cylinder block, enabling decarbonisation to be done easily and quickly—a particularly good and useful feature. The engine will tick over at low speed quite evenly, and accelerate in a most remarkable manner, showing efficiency in balance.

The clutch is exceedingly light and easy, and the gear-change is simplicity itself, these particular features making the car an exceptionally useful one for either sex.

At the end of a long and arduous trial we found no loss of water, and no adjustments necessary to the tappets. The foot-brake, however, required taking up a little, but conveniently placed wing-nuts made this a very simple matter.

To sum up, we find the A.C. sports car one that may be thoroughly recommended both for efficiency and economy.



The lines of the aluminium body of the A.C. Sports Model are particularly attractive.

LIFT UP THE TOPSAIL AND SPANKER!



Every available inch of space on the Sports A.C. is made use of, and in the above picture (left) is illustrated the novel arrangement for carrying one's tools, parcels and such-like impedimenta. The compartment, situated immediately behind the back of the seat, is easily and quickly accessible. In the centre of this page a better view of the posi-

(Below): Be it on the swift highway or in the slow and winding lanes, the car will adapt itself amazingly.



tion of this feature is obtained, and with this useful and spacious arrangement, there is no need to spoil the pleasing lines of the car with bulky articles, etc., on the running-board or any other conspicuous position. Above (right) is depicted the neat hood and screen which, although slightly restricting one's vision, provides complete protection.

(Below): The King James and Tinker Inn—established over 1,000 years ago—and the A.C. make a pretty picture.



A CAMERA CLICK—CHARMING AND CHIC!



Lady Lowther with her two children taken in the particularly pretty gardens at Thornley House, Northampton. Lady Lowther is the daughter of the late Thomas Fielden, of Grimston Park, Yorks. and in 1909 she married Lt.-Col. Sir Charles B. Lowther, 4th Bart. Photo by Miss Compton Collier.

A PAGE OF POEM IN PICTURE POESY.



The Viscountess Ipswich with her children, the present Viscount Ipswich, the Hon. Jane and the Hon. Mary-Rose Fitzroy. Lady Ipswich is the only child of Major James Brougham, of Pottersbury House, Northants. Her husband, who was the only son of the Duke of Grafton, was killed in 1918. Photo by Miss Compton Collier.

THE GRAND PALAIS WAS NOT TOO GRAND.

HAS PARIS LOST ITS LEADERSHIP?

The main impression gathered at the recent Paris Exhibition was that—well, it did not fulfil expectations. We think that our own White City-Olympia Show next month will be more interesting and representative—in quality, if not in quantity.

THE Paris Motor Show, which was held in the Grand Palais, Champs-Élysées, and in the annexe on the Esplanade des Invalides, from October the 4th to the 15th, was considered to be the most comprehensive motor exhibition since the war.

The opening ceremony was presided over by M. Lucien Dior, Minister of Commerce, and the President of the Republic was an honoured visitor. The scheme of decoration was just as splendid as ever, the colour-scheme this year being in blue, green and cream. Five francs was the charge for admission to the Grand Palais and two francs for the section on the Esplanade des Invalides, and the exhibition was open to all but ex-enemy countries. It is not an international affair to the same extent as the London Show, but there were a goodly number of Italian, Belgian, and Spanish exhibits. Great Britain and America were there also, but only in three or four instances. There were, however, a greater British representation in the motor-cycle and accessory sections, for these two branches of the British motor industry have captured, in spite of adverse conditions generally, a strong position on the French market.

As different from our own practice, where private cars, commercial vehicles, and motor-cycles have an exclusive show of their own, all these sections were combined in the one Show. There were over six hundred stands, one hundred and nine being devoted to cars of all nations, thirty-five for cycle cars, forty-one for heavy commercial vehicles, and seventy-three for coach-builders. For engines alone there were thirty-one stands, while for accessories, etc., there were more than two hundred. From the largest

limousine to the tiniest nut, every article in the construction of a motor vehicle was exhibited.

The main features of these exhibitions can be put under three headings: Price: Contrary to the tendency of British cars to become considerably cheaper, prices of French were rather on the incline. Design: The majority of the new productions were more or less of the small six-cylinder type, fitted with front and rear wheel-brakes, four-cylinder models, and two-litre cars; and Coachwork: The lines of French coachwork seemed to be mainly devoted to town carriages and sporting models, particular attention being paid to the protection of the rear passengers; but the old custom of allowing no cover whatever for the driver, other than the wind-screen, still seems to be the modern French arrangement.

There were plenty of very high-class models on show, as, to mention just a few amongst others, the 12-cylinder Fiat, the 8-cylinder Elizalde, the 6-cylinder Renault, the Hispano Suiza, the Rolls-Royce and Daimler.

Forty-four thousand francs, which sounds a considerable figure, this being £750 at the present rate of exchange, is the price for the new Ansaldo six-cylinder, with four wheel brakes and an additional one on the transmission, but both this and the 12-h.p. Unic model, costing twenty-seven thousand francs, struck one, by their good design and finish, as being worthy of their cost.

As in Great Britain so in France, the light car has become the favourite, and the show was simply crowded with them in every variety of design and price. One which was particularly interesting—the Janemian—was entirely the reverse of the ordinary car. Instead of being in front, the engine is over the back axle, and the driver has to sit where the bonnet normally would be. The radiator is under the body, but further cooling is allowed by two ventilators let into the coachwork.

An attractive proposition is the little three-seater 10-h.p. Citroen, fitted just *chic* for the golfer, even to the nickname of "Caddy." An admirable idea to carry one's golfing clubs is a sort of well at the back of the car which is really the third seat, and as a part of the car itself; there is another recess for a small trunk.

Another noteworthy exhibit was a trailer for luggage, etc., which can be fitted to the rear of any car. Mounted on a single pneumatic wheel, it is an ideal and efficient solution of the luggage problem. Inside the carrier there are a number of neatly sprung bonnet-boxes and useful appliances for carefully holding delicate dresses, while there are also trouser presses and coat-hangers. It is, without doubt, a splendid arrangement, being particularly suitable for



M. MILLERAND, the French President, makes a complete tour of the Paris Motor Show, with M. Louis Renault, on his right, and Baron Petret, left.

EVERY PICTURE TELLS A STORY.

THE INNOCENT ABROAD VISITS THE GRAND SALON.



FRONT WHEEL BRAKES WELL TO THE FRONT.

two persons going on tour—or even a honeymoon couple!

Returning to the bigger cars, the Rolls-Royce Stand was greatly patronised, and their exhibits included three of the latest 40-50 h.p. six-cylinder chassis, fitted with different types of English and French coachwork. One chassis was fitted with a special Barker enclosed cabriolet body, similar to that supplied to H.R.H. the Prince of Wales, the body, chassis and wings being black, and the bonnet and scuttle finished in highly-polished aluminium. Although the new 20-h.p. Rolls-Royce was not on show, one of these interesting models was seen outside. Being a smaller reproduction of the full-sized model, it runs, we understand, just as quietly, and the engine, which is entirely enclosed, looks more like a neat metal box.

In the sports classes the Panhard was amongst the best. Having a dark chocolate body, with light grey wings, its colour scheme included lines of black and red, and looked extremely smart. Then there was the new Peugeot model, with left-hand drive and front-wheel brakes; the Mors with separate adjustable wind-screens for front and rear passengers, and the Talbot Daracq—in future to be called the "Talbot"—equipped with a concealed hood, and costing £500.

A model which aroused particular attention was a double engine with two transmissions on one frame. It is really the equivalent of two cars with one engine of 10-h.p. and another of 12-h.p., each driving independently of the other, so that in town the 10-h.p. can be used; in the less busier parts the 12-h.p., while in the country both can be used together. The price is twenty-six thousand francs for the chassis, and the petrol consumption is claimed to be very satisfactory.

Another light car—the Lancia, 10-h.p.—had a very smart and unique body, discarding side-frame members. It is fitted with a steel frame to which working parts, upholstery, etc., are attached. Cheapness being the idea, 32,500 fr., is the price of the complete four-seated touring body.

Front wheel brakes are finding great favour on French models, for nearly

every car exhibited was fitted with them, the Perrot system being the most popular. Some, however, were equipped also with Servo motors, these being regarded by many as necessary where front wheel brakes are fitted, while other cars were made so that front wheel brakes could be fitted if desired, even to including adaptors in their construction. This is so in the case of the 10 h.p. Vermorel.

Many improvements have been embodied on the latest Berliet, even to a newly designed radiator. Instead of both brakes acting on the rear wheels, as before, the 12 h.p. model now has one acting direct on the transmission with one only on the drum, and 80 mm. by 130 mm. are the dimensions of the new engine.

Some new models of particular interest were:—The new Delaunay-Belleville, with overhead valves and camshaft; the 10 h.p. Peugeot, with a spiral bevel as the final drive, while, contrary to the ordinary practice, the speedometer drive is incorporated in the torque tube; a new and extremely neat Delahaye 15 h.p., and a most attractive six-cylinder Ansaldo, embodying a host of improvements on its previous models. Then there was the new Renault Sports model, with a covered radiator, the air reaching it through ventilators in the bonnet.

In the coachwork section there were some of the most queer and weirdest designs ever exhibited, particularly so in the case of the Panhard, which was fitted with a completely enclosed

covering for the rear passengers, while the front seats were entirely exposed. If its design was intended to attract attention, the idea suited its purpose, for the stand was simply hemmed in! Another unusual example of bodywork was the 10 h.p. Voisin, the colour scheme of which was an effective Scotch plaid.

Many makes were precisely the same as last year, but in most cases the intervening period had not been wasted, for this had been utilised in "improving the breed."

There were many new features, a few of them being an exceedingly simple and accessible brake-adjustment on the Schneider; the dished wheel hub on the Barre; a new and smart method of carrying the spare wheel on the Ballot; recessed sparking plugs of the Mors; and detachable covers enabling the driver to look into the crankcase of the Alfa-Romeo.

It is surprising to find that "all-weather" designs, which have become so popular in Great Britain, are still very little favoured in France; and accessibility, so greatly desired by British motorists, seems to have been sacrificed by giving engines and bodies a clean appearance, even to the hiding of accessories.

Taking everything into account, the main features of the Seventeenth Paris Salon were: Considerable improvements in suspension systems; marked refinement in coachwork generally, and the betterment in many respects of last year's models.

Quite an enterprising idea of many exhibitors was the presence, outside the Show, of a number of demonstration cars, which by trial runs were used to further impress prospective clients. As a matter of fact, there were, of one particular make, over 120 cars available for this purpose. The presence of these, and the general conglomeration of visitors' cars made the approaches to the Show greatly congested. It was simply impossible for anyone in Paris to be unaware for long that the exhibition was taking place.

Despite all this outside activity and the general air of the great Salon one came back with the impression that French manufacturers had not lived up to expectations.



A GENERAL view of Paris Motor Show, held in the Grand Palais, Champs-Élysées, which was considered to be the most comprehensive motor exhibition since the war. A brisk trade revival has resulted.

"GOOD ORDER IS THE FOUNDATION OF ALL GOOD THINGS."—(BURKE)

THE SECRET HISTORY OF A FAMOUS CAR.

There is a measure of national pride in manufactures of a country which attain international recognition. We deal here with such a case, where the products of the firm are recognised throughout the industrial world as criterions of British engineering achievement.

WE all know men who are too busy to succeed. Their chatter fills the universe. They are too busy to think; too busy to concentrate. They fret and fail while quieter men win through.

And we all know that there are big firms like these individuals. We are acquainted with Messrs. Fussy Ants and Busybee, Ltd. Their factories are filled with the din of battle, and their staffs are mobs instead of being drilled teams. All that is done is accomplished by the expenditure of so much nervous energy that we may be misled into thinking that the clatter and feverish haste indicate efficiency.

It is only when we become intimately acquainted with perfectly organised firms that we realise that good work is usually done quietly and without fuss. Noise indicates frictional losses. An efficient firm is like a perfected machine which has been "run in," and works smoothly and apparently without effort.

Among the pioneers of the British Motor Industry there is a great manufacturing organisation which has been "running in" since 1868. It is known as Humber,

Ltd., Coventry, and the name became world famous in the early days of bicycles. Thomas Humber, the founder, once built the extra-"ordinary" machines which we nicknamed "the penny-farthing." Later the firm standardised the diamond frame, which has remained the universal standard in cycle construction ever since, and the principle of which is embodied in most present-day motor-cycles. The late King Edward VII., when Prince of Wales, rode a Humber tricycle.

For over thirty years before the motor car was regarded as a serious proposition this firm was famous, and when the first 5 h.p. Humberette appeared in 1900 it carried with it the guarantee of a great name in the engineering world.

It is necessary to recall these facts in order to understand how the wonderful organisation of the present day has been built up. The Humber firm is not a mushroom growth. It embodies the brains and skill of two generations.

We can remember that our first pedal bicycle was bought from the Humber Company in the days of our youth, and since then we have had the good fortune to become acquainted with practically all

the different models of motor-cycles and cars produced by the firm. Until recently, however, we had only admired the products without having precise knowledge of the methods by which the results had been achieved.

The opportunity of prying into the secrets of the company was given to us, and some of them we propose to reveal. Not quite all, perhaps, for there are some confidences which must be respected. There are testing and experimental departments, for example, which are described as the "holy of holies" and into which no outsider is ever admitted unless accompanied by the managing director. These we were privileged to see, and we have no doubt that there are many individuals in various parts of the world who would have been glad to pass those doors which bear the words NO ADMITTANCE in very large letters. We penetrated to those secret chambers by degrees.

Our first impression of perfect order and quiet effort was gained in the great entrance hall to the offices, which has something of the dignity which one usually connects with buildings of national importance. A glance round that great



One of the most notable characteristics of these fine works is the mathematical precision which controls every phase of production and assembly; indeed, this is a most pronounced feature of the organisation.

"MUCH DONE, MUCH DESIGNED, AND MORE DESIRED."—(WORDSWORTH)

hall reveals much of the firm's history. It tells us the romance of mechanical transport during a period of half a century. We may see on those walls records of championships won on Humber bicycles in the early days of racing and record making, and from these we may turn to a big glass case which contains an exquisitely finished example of the wonderful B.R. aero engine, which embodies every refinement of the highest branches of British engineering, and was manufactured by this firm, during the war.

The late Sir John Alcock, it is worth noting, after his great Atlantic flight with Sir Arthur Whitten Brown, paid a visit to the Humber works and bought one of the firm's 10 h.p. cars. Sir John Alcock evidently appreciated good engineering workmanship.

There are war records also on the walls of the big hall. There are names written in gold of employees who served, and we counted between six and seven hundred before we tired of the task.

From this quiet hall we passed into the great machine shops filled with the drone of industry. They are jungles of mechanism, and some of them seem to extend infinitely, for it is as impossible to see their limits as it is to view open country when one is in a tangled forest.

Yet in these mechanical mazes there is nothing that indicates haste or worry. Keen-eyed, soldierly-looking men move quietly among the many machines like figures in a cinematograph. There is no unseemly rushing from place to place. They are all part of the great machine, and they appear to be doing their duties with the precise and effortless motions of

turret lathes, gear shapers and other tools of steel.

One realises that they are all driven by some unseen power, and presently it becomes apparent that the driving force is organisation. A hint is given in some shops by the orderly lines of notice boards which hang in long perspectives. On these one reads "10th Operation," "11th Operation," "12th Operation," and so on in sequence until the figures on the boards are so diminished by distance that they are unreadable.

These boards indicate the underlying system. Every piece of material brought into the works follows a definite course like that of water between the banks of a stream. Its progress is always forward. One may say that it comes in at one end of the vast buildings and leaves the other as part of a car. At every part of its progress it is exactly where it is wanted, which accounts for the fact that there appears to be no haste, no confusion, no waste of effort.

All Humber cars are especially notable for the exquisite beauty of their bodywork, and it was interesting to watch the system of manufacture. We were first shown the great timber store containing stocks of ash, mahogany and other woods from all parts of the world. Every plank—and there appeared to be some hundreds of thousands—bore a separate label with symbols indicating its source and age. Every piece of wood used in a Humber body is seasoned at the works by time alone. No artificial method is ever employed. In times of shortage a firm that had not such a system as this might be compelled to use partially or artificially seasoned wood. The Humber firm runs no risks. Provision is made for all de-

mands many years ahead, and, in due order of precedence, the time-seasoned wood, which no atmospheric changes in any climate will injure, is drawn from stock.

The seasoned wood passes to the shops filled with wonderful shaping and planing machines. In some wood-working shops which we have seen sawdust and chips lie almost knee-deep on the floors. There is no dust in the Humber works. Every scrap of waste wood is drawn away through big tubes by electric fans. By a system of fans and tubes, also, every shop in the works is ventilated and kept at an even temperature throughout the year. Most works have heating arrangements, but few introduce chilled air for the comfort of workers in hot weather. This may seem a small matter, but it is just one of many points which indicate perfection of organisation.

Every piece of wood when shaped by special machinery has its number. There are skeleton bodies with every part numbered prominently, and these bodies are models or keys. It would astonish most motor-owners to see how many differently shaped pieces of seasoned wood, exactly dimensioned to patterns, are used in the construction of a motor-car body of the highest possible grade.

When the skeleton bodies have been fitted together, they receive their metal skin, to which is applied the exquisitely glossy, glass-like finish for which Humber cars are famous. The metal is first treated with a rust-resisting solution, and over this a special aluminium paint is applied. Then coat after coat of special paint is sprayed on with air brushes which distribute it evenly, for the paint is broken into such minute particles that it look-



To the uninitiated it is a matter of wonder how the multiplicity of parts and processes are so successfully co-ordinated in the final result. Yet it all appeared to run with clockwork simplicity.

"THE OLD ORDER CHANGETH, YIELDING PLACE TO NEW." (TENNISON)



THE 11'4 h.p. HUMBER 2/3 SEATER MODEL

A comfortable double dickey seat, with folding arm-rests, is enclosed in the spacious boot.

“ 'TIS SWEET TO KNOW, THERE IS AN EYE WILL MARK—



THE 11½ h.p. HUMBER SALOON MODEL

OUR COMING; AND LOOK BRIGHTER WHEN WE COME." (BYRON)



THE 15.9 h.p. HUMBER 5-SEATER TOURER MODEL

"AN INTELLIGENT MAN JUDGES THE PRESENT BY THE PAST." (SOPHOCLES)



THE 15.9 b.p. HUMBER SALOON DE LUXE MODEL

"HERE'S METAL MOST ATTRACTIVE."—(SHAKESPEARE)

like a jet of smoke or tinted steam. Painting with these air brushes must be fascinating work.

After each coat the surface, when dry, is rubbed with a very fine abrasive obtained from cuttlefish until it is of a silky smoothness. In all sixteen coats are applied to every car body before it leaves the Humber works. The last two coats of varnish are applied by hand, and the varnishing room is one of the secret chambers into which only privileged persons may peer. It is absolutely dust-proof. The only air which enters is filtered through gauze so fine that it looks almost impervious, and the temperature is kept at 80° Fahr. throughout the year. There are certain secrets which must not be revealed.

Some motor-owners may think that we have given too much attention to the beauty that is only skin-deep, even though that skin may consist of sixteen coats. But we have dwelt upon it because the minute attention which has been given to one detail is typical of that which has been given to all.

A remarkable feature of a Humber car is that practically every part is made in the works—even the aluminium castings, which most manufacturers purchase. The arrangements for gauging and testing all parts are extraordinarily elaborate.

We were permitted to see the most closely-guarded of the secret chambers. This is the experimental and testing department, which is always under the personal supervision of Lieut.-Colonel J. A. Cole, the Deputy Chairman and Managing Director. It is equipped with electrical apparatus specially designed for the company. When an engine is being run on the test-bench all information regard-

ing its performance, such as revs. per minute, power developed, temperature, etc., may be read from a board bearing a number of dials.

During a recent test a Humber engine was run *on full throttle for one hundred hours*. During this tremendously severe trial it made 11,150,000 revolutions, and when dismantled was found to be in perfect condition. For eight hours it was running continuously at 2,500 r.p.m.

The testing apparatus is so designed that it not only indicates brake horsepower, but also frictional losses in the engine and transmission system. The engine and gear-box are placed on the bench and connected with a dynamo-motor. When the engine is running the dynamo acts as a brake, and the twisting strain upon it is measured in pounds which, by a formula, may be converted into horse-power. The process may be reversed, and the electric motor then becomes a dynamo which turns the engine through the gear-box at any desired number of revs. per minute, while a dial indicates the power required. Thus it is possible to discover not only how much power the engine can develop, but also the amount of power absorbed by the engine itself and the gear-box.

To such careful testing the free and smooth running of Humber cars may, to a large extent, be attributed.

The "running in" process is not confined to the engine alone. After the power unit has been tried on the bench it is fitted into its chassis. The rear wheels are then connected by belts to pulleys attached to electric testing motors, and in this manner the entire chassis is tested

under its own power, which is transmitted to the road wheels. The advantages of the system are obvious to the practical motorist who does not merely desire to know that his engine develops a certain amount of power, but wishes to be assured that a large proportion is not absorbed by frictional losses before the power reaches the driving-wheels.

Thus, Humber cars are tested and "run in" under observation in the works. The chassis are not taken on the road for a rough and ready test, as it is recognised that a naked chassis is very vulnerable to dust. Not until the body has been fitted and the entire car is complete is it taken out for its final test on the road, during which it has to climb a known gradient and prove its efficiency in every direction.

Owners of Humber cars have to thank Lieut.-Colonel Cole for always watching their interests in a very practical manner. He has been driving since 1898, and is as keen on motoring as ever. Every alteration and proposed improvement to Humber cars is given a prolonged road test by Colonel Cole, who always takes the wheel of his own car, and will allow no alteration or addition to be made to new models until he has satisfied himself by personal experience that the innovations are improvements of real value.

Colonel Cole, who is an engineer by training, is one of the pioneer motor-owners in this country. From being a keen private owner of cars in the very early days of the movement, he has progressed to his present position. Perhaps his notable success is due to a large extent to his almost unique experience as a private owner of cars, which makes him view everything from the private owner's



In regard to the mechanical aspects of the complete car, jigs and gauges protect the interests of the purchaser to the thousandth part of an inch. And an equal measure of care is taken in the painting and general finish of the coachwork.

"THEY WHO ARE PLEASED THEMSELVES MUST ALWAYS PLEASE."—(THOMSON)

point of view, and not only from that of the manufacturer.

He is president of the Society of Motor Manufacturers and Traders. He was also appointed chairman of the Research Committee of the Research Association of British Motor and Allied Manufacturers, and is also vice-president of this Association.

It is Colonel Cole whom we have to thank for the production of the present 15.9 h.p. Humber, which is undoubtedly the most notable type produced by the company in their long and honourable history.

The employees of the company have much for which to thank Colonel Cole. Perhaps the fact that he has held a commission for over thirty years has taught him the value of team work and *esprit de corps*. It is certain that the army of workers who serve under him at the Coventry works have learned how to pull together. We talked with men in all departments, and in every case we found enthusiasm.

Humber, Ltd., is a happy colony of workers. They work well and play well. They have recreation rooms in which dances and whist drives are held regularly. They have lawn tennis courts (grass and hard), cricket ground, bowling greens, and a grass track on which cycle races are often held.

It is not surprising, therefore, that it should be a happy firm, and we all know that work done happily is good work.

It is doubtful if any cars in the world have a finer record for reliability than Humbers. In Coventry there is a 1904 model of 18-22 h.p. which has been in daily use for eighteen years. It belongs to a private owner, and during the car's long working life, which is by no means ended, no replacement of any important part has been necessary.

A 10 h.p. Humber of 1914, owned by a private motorist, has up to the present time travelled 37,000 miles with practically no attention, and the company recently received a letter from a delighted customer who stated that a 14 h.p. 1915 car had a record of 29,765 miles without a single stop on account of mechanical trouble, and the only money spent on repairs amounted to 6s. This particular car was bought for £400, was used for six years for strenuous work in Wales, and was sold recently for £370. In other words, the owner had the use of a high-grade car for six years and then found that the value had depreciated by only £30, or at the rate of £5 per annum.

Another remarkable record is that of a 1910 model 16 h.p.

Humber which the owner used in Sumatra and Java and after six years sold to a Chinaman. The original owner reported that he had seen it in 1919 and that it was running as quietly as ever after nine years of hard work in the East.

We could quote from hundreds of other original letters which we have seen, but these examples, chosen at random, are sufficient.

Those who saw the wonderful "Titania Palace" at the Woman's Exhibition at Olympia will remember that with the exquisite little fairy home there was a beautiful little model of the ideal car which was called the "Grey Fairy." Many must have admired it, but perhaps all did not know that it was an exact copy in miniature of a 15.9 Humber. The Fairy Palace with the "Grey Fairy" car is to be exhibited all over the country for the benefit of the Waifs and Strays organisation, and it will travel in a 15.9 h.p. Humber with a body specially built for it.

We left the Humber works with very pleasing impressions, of good work done happily, of abnormal business even in dull times, and of very high efficiency in every department. As to the running of the new models one can truthfully speak in eulogistic terms. Amongst those qualified to judge car performance, the name Humber typifies all that should be anticipated from a representative British manufacturer. What more can one say?

HUMBER CARS FOR 1923.

A particularly handsome range of cars is being placed on the market for 1923, comprising the 11.4 h.p. 2-seater with double dickey seat, 11.4 h.p. 4-seater, 11.4 h.p. coupé with double dickey seat; 11.4 h.p. saloon, 15.9 h.p. 5-seater, 15.9 h.p. saloon, 15.9 h.p. landaulette, and last, but not least, a most attractive and lavishly finished 8 h.p. light car, and every one of these models embodies nearly twenty-five years' experience in motor car construction.

THE OPEN MODELS.

Each open model is equipped with an all-weather hood and rigid side screens, a combination which ensures a perfect weather-proof vehicle when the hood is raised and the screens placed in position. All controls come easily to hand, and the luxury of the seating accommodation generally can only be appreciated to the full by an actual inspection of the cars.

The 15.9 h.p. 5-seater possesses a rear cowl attachment complete with two efficient windscreens. The cowl itself is quickly detachable, and may be removed when the car is used as an all-weather vehicle.

11.4 H.P. COUPÉ AND SALOON MODELS.

These are both delightfully designed. The coupé is fitted with a well-upholstered double dickey seat, and the 11.4 h.p. saloon seats four, the driver's seat being of the adjustable bucket type.

Both the coupé and the saloon models are beautifully upholstered in rich Bedford cord.

15.9 H.P. SALOON.

This model is luxuriously appointed throughout, and illustrates car refinement and comfort in the highest degree. Its seating accommodation is roomy, and its equipment lavish, having been completed to the last detail.

15.9 H.P. LANDAULETTE.

This makes an ideal town carriage; the driver's seat is partitioned off by means of two glass panels, sliding in velvet-lined channels. The interior is upholstered in rich Bedford cord, identical with the saloon model, and an occasional seat folds neatly into the dividing partition.

8 H.P. LIGHT CAR.

A miniature Humber model has been evolved, comprising all the features of Humber quality.

A detachable seat for two children is provided in the back and, when removed, permits of the whole space being utilised for luggage; the latter being completely enclosed and protected by the hood in wet weather. A self-starter is fitted, together with five lamps, as in the case of all other Humber models.



Lieut.-Col. Cole, who so ably presides over the destinies of the Humber Company, is also honoured with the position of President of the Society of Motor Manufacturers and Traders.



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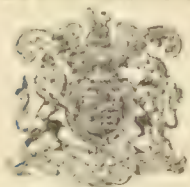
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THE SHOW

2nd - 11th November, 1922

**Don't miss our exhibit
STAND No.**

120

WHITE CITY

Rapson Tyres, Jacks and Dipping
Headlight Fittings will also be shown
fitted to:

The Prince of Wales's
CROSSLEY
STAND No. 272, OLYMPIA

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RAISING THE CURTAIN.

ONE of the things that most men and all women desire is a peep behind the scenes. There is always a world of romance on the other side of the curtain.

When we were younger there were professional moralists and comfortably salaried saints who warned us that there was no glamour behind the scenes. Fortunately, we have all known better. We all want to peep. We all want to know secrets. We all strive to glimpse the romance which is sometimes hidden behind a curtain, and sometimes shimmers beyond the skyline.

You know the legend of Lady Godiva and Peeping Tom. You cannot help knowing it if you have ever been to Coventry. It is hurled at you. You know that the fair lady Godiva, clad only in her loveliness and saintly virtue, rode through this town in which there were then no motors.

You are aware that the people were requested to remain indoors, draw their blinds, and make it an early closing day, but you remember that a certain tailor, whose Christian name was Tom, peeped as her ladyship rode by.

According to the poetic legend he was blinded as punishment for the crime of curiosity and earned the scorn of all subsequent generations.

We do not believe it. He did not earn scorn. The world smiles at the memory of Peeping Tom with good-natured tolerance, for he was human. If he was the only person in Coventry to pay the patrician heroine the compliment of an admiring glance, Mrs. P. Tom might have remonstrated, but a world that understands human curiosity would not condemn him utterly. Besides, how would some of our most gifted painters have obtained data for noble pictures had there been no witness? In her secret heart, would Lady Godiva have felt flattered if nobody had shown interest in her heroic exploit? We believe she forgave Peeping Tom when the society editors of her day

How interesting it is to raise the curtain on a new show! The "Motor-Owner" has been playing "Peeping Tom"—not only in Coventry, but in the leading motor manufacturing centres. We give you all the real inside news—culled direct from the horse's mouth so to speak; or, to speak more accurately, direct from the managing directors of many of the leading firms. You will find these "peeps behind the scenes" alike interesting and instructive—if we may venture to say so!



The Lanchester Saloon is the embodiment of luxury, elegance, and automobile perfection.



MR. HAMILTON BARNSELEY is the presiding genius of the Lanchester Company, the pioneers of many notable developments in automobile engineering.

spread the news, and, by mentioning the curious tailor, gave the story the human touch that has made it live through the centuries.

For some weeks past we have been playing the part of Peeping Tom in Coventry and other cities. We have seen many things which we were intended to see, and some that we were not, and we propose to let motor-owners into some secrets.

We are going to take them behind the scenes. We are about to lift the curtain, or raise the blind, like Peeping Tom.

It is possible you may have heard that there is to be a small exhibit of motor cars next month. Probably it will attract some two hundred thousand people. The biggest hall in London is not of sufficient amplitude to hold it, and it will overflow again into the White City, which is not a city nor particularly white, but at any rate is to be made warmer this year.

Now this great exhibition is a spectacle compared with which all other entertainments are paltry.

It is an amazing show. The world has nothing quite like it. It represents the work of thousands of minds. It means fortune to some; despair to a few. It is a drama; it is a joyous revue. It is Vanity Fair; it is Hard Fact. It is wealth, luxury, and fun; it is daily bread and toil. It is glitter, it is glamour; but if you want to know something of the romance that lies behind it all you must come with us behind the scenes.

To whom would you go if you wished for authentic information about this great spectacle which is now being prepared? Obviously, the best thing to do is to go to the man at the head of affairs. It may be difficult to see him, for the men who matter have a disconcerting habit of being busy.

We sought Lieut.-Colonel J. A. Cole, managing director of Humber, Ltd., Coventry, and President of the Society of Motor Manufacturers and

BEHIND THE SCENES.

Traders, Ltd., the organisation which in the world of automobilism is the unobtrusive but all powerful "Bunty" that pulls the strings.

Have you ever noticed that the men at the head of affairs are generally quiet, and the only ones who do not seem excited? You would certainly remark the fact if you saw Colonel Cole. He is one of the most active leaders of the motor industry, but his office has the quiet atmosphere of a scholar's study and the calm of a cathedral. In a world that clangs and frets around him he works with the quiet abstraction of the student, the inventor, or the devotee.

One has to know him well before one realises that the quiet, modest manner hides a forceful personality and a mind accustomed to looking very far ahead.

We came to the point at once. We said that there is one thing that motor owners want to know. They desire to be told if the new prices of cars are stable. They have been living in a world of rumours. Non-technical newspapers, not always authoritatively informed, have been telling them of vast reductions of prices, and have hinted that still greater reductions are to be expected. This can have only one effect. It makes people reluctant to buy. Why should they order a car at the Show, they argue, if by waiting they may save money? To the natural depreciation of value due to use of new cars they do not wish to add a considerable figure representing the difference between Show prices and those which may possibly rule later if the forecasts of uninspired prophets prove correct.

On such an important matter as this authoritative statements from the responsible leaders of the industry are of great value to prospective purchasers, and we are glad to be able to give exclusive information as the result of our enquiries.

Colonel Cole told us that the prices of Humber cars have been

fixed and will remain stationary until the Show of 1923. Purchasers will gain nothing by waiting. The reduced prices of new models have been fixed after the most careful deliberation, and they are to be attributed to improved organization, and an appreciable reduction of the costs of labour and material. There will be no alteration of quality of material or workmanship either in the chassis or the bodywork, for which the firm is, as we all know, famous.

All possible contingencies have been

taken into consideration, and the prices quoted for the new models which will be seen at the Show will remain in force during the following twelve months. The same policy was followed during the last twelve months. Prices were fixed in preparation for the Show of 1921, and remained the same throughout the year.

It is of the greatest importance that these facts should be recognised. They mean that private buyers may with perfect confidence place orders *now*. Nothing but disappointment will be the result of waiting until the next season is far advanced

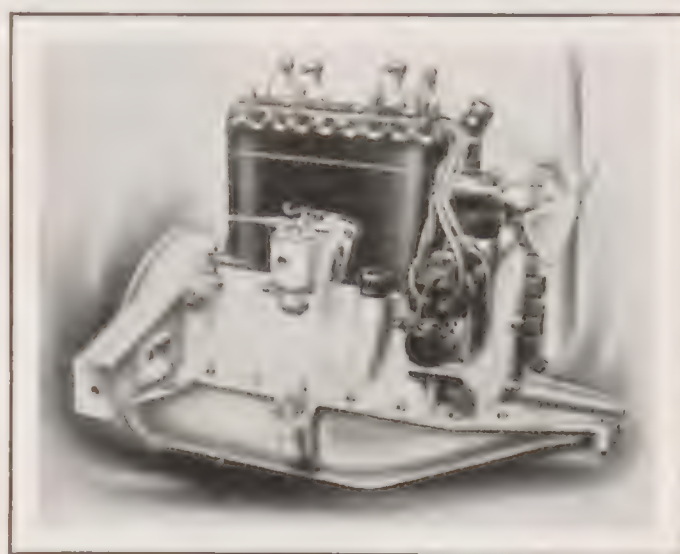
in the hope of further reductions.

With regard to prospects of the coming year, we found Colonel Cole perfectly confident, and he has reason to be, for we know that there are bonds of friendship between this long-established firm and thousands of owners of Humber cars in all parts of the world. We know also that hundreds of the firm's agents have been loyal to the name of Humber for a quarter of a century, and that a large proportion of them began their connection with the firm twenty-five years ago, when the name was famous in the cycling world. These have grown up with the motor industry, and many of their customers bought Humber cycles in their youth, then Humber cars, and have remained faithful to the firm's products during their motoring careers. Such bonds of friendship have only been forged by very sound policy, and the principles underlying that policy will not change.

Colonel Cole is not only a successful business organiser, but is also intimately concerned with all technical details of design and manufacture. He accorded us the privilege of seeing an invention of his own which will be incorporated with every Humber car made during the coming year. At the time of our visit we were the first journalists to whom it had been shown.



Offside view of the new 20 h.p. Rolls-Royce engine, illustrating the 2-jet R.-R. carburettor, and the high tension distributor, with cover removed.



THE Italian school is remarkable for the neatness of the designer's art, which is so happily typified in this 10/15 h.p. Fiat engine. Yet in no way is accessibility sacrificed.

A C L E V E R I N V E N T I O N .

It is far more interesting than an ordinary improvement of detail, for it is one which involves new principles in the design of pistons. It will be discussed with interest all over the world by engine designers and private motorists.

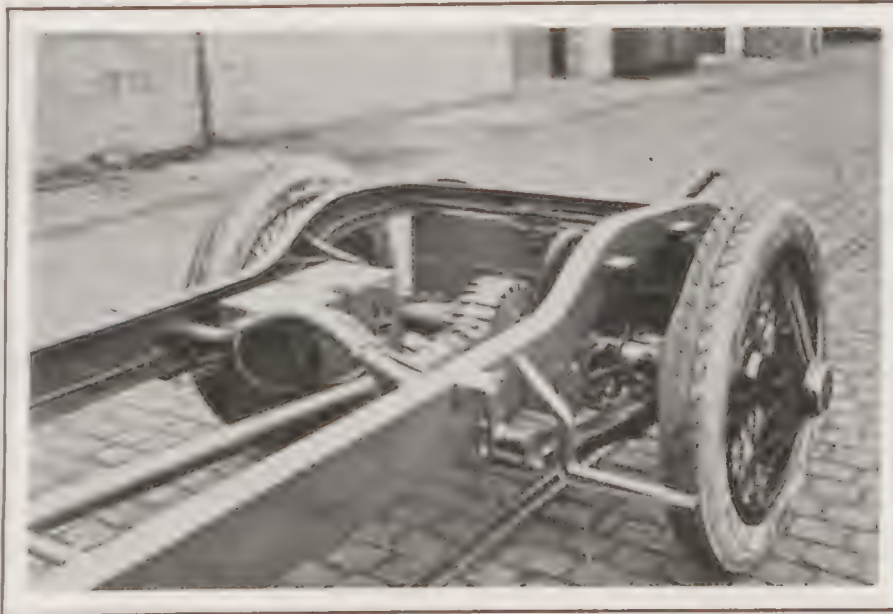
You know, of course, that the head of the ordinary piston of a four-stroke engine is either flat, concave or convex. The contour of the head lies in a plane at right angles to the sides of the piston. In simpler language, it resembles an inverted coffee tin.

The new piston designed by Colonel Cole has a head which is not at right angles to the sides. It is slightly sloped so that one side of the piston is higher than the opposite side.

Experiments carried out quietly during a long period have proved that by this arrangement the side thrust of the piston against the wall of the cylinder during the power stroke is minimised. You know that this side thrust is due to the fact that the connecting rod swings outwards from the piston's line of travel owing to the throw of the crankshaft, and therefore when the explosion takes place that side of the piston which is opposite to the out-swinging big end of the connecting rod is thrust against the cylinder wall. This angular thrust causes "piston slap" and wear on one side of the piston.

Now, Colonel Cole has discovered that if the piston is higher on the side opposite that which bears the side thrust, "piston slap" and uneven wear are eliminated. Very prolonged tests have proved that by exaggerating the slope of the piston head it is possible to do more than balance the side thrust and actually cause the piston to show more wear on the opposite side.

Continued experiments have determined the correct slope of the head which causes the side thrust to be balanced exactly, and consequently this



The new 20 h.p. Rolls-Royce chassis, showing the rear axle, with its shock dampers, and arrangement of accumulator housed within the chassis frame.

type of piston will be fitted to all Humber engines in future and will eliminate the possibility of "slap" and uneven wear.

This is only one of the improvements to Humber engines this year. Another very important one is the introduction of overhead inlet valves. Instead of having conventional side-by-side valves, the inlet will be placed over the exhaust, an arrangement which has been proved to give greater efficiency, and which has the very decided advantage of causing the incoming gas

to impinge directly upon the head of the exhaust valve and thus keep it cool.

An objection sometimes made to overhead valves is that the operating mechanism is likely to be noisy, but in the new Humber design such objections have been overcome completely. The camshaft remains within the crankcase and it operates the ordinary side-by-side tappets which are adjustable in the usual manner. The exhaust valve tappet operates directly in the customary way, but the inlet tappet actuates the overhead valve through the medium of a rod and rocker arm.

Clatter in the operating mechanism is obviated by an ingenious device which we believe to be entirely novel. Instead of there being only one inlet valve spring, there are two. One is on the inlet valve itself, and the other is on the operating rod. This prevents any "dancing" of the mechanism, and it has been found that the new engine is quieter than the old side-by-side valve type, and that this is specially noticeable at low speeds. It is also remarkably flexible. The 15.9 h.p. model, for example, runs with silky smoothness at any speed between 4 and 60 m.p.h. on top gear.

In addition to the 15.9 h.p. and the 11.4 h.p. models, an entirely new light car, to be known as the 8 h.p. Humber, has been prepared for 1923. The four-cylinder engine, the actual rating of which will be 7.8 h.p., is of the same design as those fitted to the larger cars, and has the new overhead inlet valves.

We think that lady motorists will be particularly interested by the new type of body which will be fitted to this very charming little model. It is a two seater, but instead of having the ordinary dickey, there are two additional seats at the rear which are intended for children. The advantage of the new arrangement is that when the hood is raised all the



HERE you have a further example of neatness as practised by the Italian school. Whether you study the facia board, the pedals, the levers, or the throttle control, first neatness is there.

PRICES GOING UP AGAIN?

passengers are protected instead of two of them being left outside in the cold, as they would be on an ordinary dickey seat. This new model, like all other Humber touring cars, will be fitted with celluloid side windows, which in conjunction with the hood convert an open body into one which is entirely enclosed.

This small car will have exactly the same high finish as the larger Humber models, and all motorists know that these cars are noted for the beauty of their coachwork.

We fancy that the 8 h.p. Humber, which, completely equipped, is to sell at the very low price of £275, will be recognised as a really beautiful little vehicle. It will be described as "a sound engineering job," "a sweet little car," "a darling," or "the terminus in toppingness," according to the sex, age, and upbringing of the critics who will crowd around it.

We left Colonel Cole feeling enthusiastic over the prospects of the private motor owner. The hoped for reduction of prices has been made; the new prices will be stable, and purchasers who buy now will run no risk of finding that the market value of their cars will be unduly depreciated by further reductions during the forthcoming season. The purchaser of a car to-day obtains better value than he did before the war. Smaller and more efficient engines do work more economically than types which have been superseded, and the older firms, with the added experience of the last few years, have effected improvements in methods of production, design, material, and workmanship.

The last words of the President of the S.M.M.T. were to the effect that there has been too much irresponsible talking about the im-



The 24/60 h.p. 6-cylinder Sunbeam limousine landaulette.

mediate future of motoring, and that he welcomed our policy of seeking authentic information at the source so that we might tell the private owner exactly what to expect.

SIR HERBERT AUSTIN SAYS PRICES MAY RISE.

Later it was our good fortune to have an interview with Sir Herbert Austin, head of the Austin Motor Co., Ltd., of Birmingham, and to him also we put the case of private purchasers who wish to know if prices



HERE is a fascinatingly proportioned saloon body, mounted on a Bianchi chassis, a combination happily typifying perfection in the respective productions.

which will rule at the Show may be regarded as sufficiently stable to enable them to place orders with confidence.

He expressed the view that there are indications of a rise rather than a further fall in the prices of cars.

"At the present time prices are very low in relation to the cost of manufacture," said Sir Herbert, "and people who are waiting for them to become lower are likely to be disappointed. I think prices are likely to stiffen rather

than weaken. If one takes a world-wide view of the situation, one sees indications that manufacturing costs will increase. In the United States the price of materials has been rising for some time, and there are many labour difficulties and threats of strikes there as elsewhere. I think the prices of the British cars have reached bed-rock, and no further reductions could be made without sacrificing quality. The public are mistaken if they think they can get the same quality of material and the same workmanship as are put into high grade British cars at prices lower than those now fixed. Such value for money has never been offered either before the war or at any other time."

Sir Herbert does not believe in "Show stunts." He does not think that improvements in design should be hoarded during the year in order that manufacturers may have what are called "talking points" when the new season models are staged at Olympia and the White City. He believes in the policy of giving customers the benefit of every improvement directly it is made, without regard to the time of year.

"I would like to see a Show every two or three years," he said, "not

IS THE SPEED LUST DYING?

every year. If it is thought desirable to hold an exhibition every twelve months, then I think it should be in April or May, when people are really thinking of buying cars for the season. It should not be regarded as the time for bringing out new models, but should be a spectacular display of cars just when people are really interested."

Sir Herbert's views are always independent, original, and vigorously expressed. There were many flashes of humour in his quick sentences spoken as he paced up and down his office.

"The speed craze is dying," he said. "It is because there is very little police trapping now, and so it is no longer a sport to try to evade the law. The way to make people want to do anything is to tell them they must not. . . ."

"In the coming year increased comfort is what most people want. There is a much greater demand for closed cars than ever before, not only big ones, but those of all sizes. On landaulettes the chauffeurs' seats will be better protected. It pays to make the chauffeur comfortable. He is likely to take risks at the end of an imperfect day and is tempted to finish a journey recklessly if he is cold and wet. Possibly the fact that so many owners drive has had the effect of making them sympathetic, and so they will have more consideration for their chauffeurs. . . ."

"Increased comfort will be the most notable feature of the Show this year. We have to cater for a greater number of staid people who do not desire the roads to become racing tracks. Luxuries will not be regarded as 'extras,' but will be included in the standard equipment of cars. Motorists are not



An example of Leyland automobile achievement in the super luxurious realms.

becoming effete, but they are growing more sensible, and far more discriminating. . . . There will always be a demand for the best British workmanship. . . ."

We learned that a four-door coupé, and a "Mayfair" limousine with the driver's seat enclosed, both mounted on 20 h.p. Austin chassis, will be strong features of the programme for next year.

The demand for small cars will be met by the new "Austin Seven," the wonderful little two-seater which in

tests has attained 52 miles per hour and which has proved capable of travelling 78 miles on a gallon of petrol.

It is a pretty little vehicle with a four-cylinder water-cooled engine rated at 7.2 h.p. It has three forward speeds and reverse, and helical bevel drive. An uncommon feature on such a small car is the arrangement of brakes on all four wheels. Those of the rear wheels are operated by a pedal, and those on the front are applied by hand.

The carriage work is particularly attractive. There are two bucket seats for driver and passenger, and both seats are adjustable, which will please lady drivers, who will certainly admire this little Austin. There is also a rear seat which will carry two or three children or a considerable quantity of luggage. The equipment includes hood, wind-screen, and full side curtains which open with the doors, so the occupants are fully protected in bad weather. At the low price of £225, we think the Austin Seven should have an enormous sale.

MR. HAMILTON BARNESLEY (LANCHESTER) REVEALS A SECRET.

At the Birmingham home of the famous Lanchester cars we found Mr. W. Hamilton Barnesley pleasantly optimistic. In spite of the excessive taxation of the wealthier classes, he has proof that there is still, and considers that there will always be, a demand for cars of the highest possible grade. Manufacturers must either build to a price or build to an ideal, according to the customers for whom they cater.

"The policy of the Lanchester Company remains, as it has always been, that of building to an ideal—the best possible. We pay our



THE pleasing lines of the 19.6 h.p. Crossley two-seater touring model are universally admired. The new models of this famous make, at the reduced prices now in operation, offer particularly good value for money—quite one of Britain's leading achievements in this direction.

A CURE FOR INSOMNIA!

customers the compliment of regarding them as connoisseurs," he said, "and if we have ever thought an improvement desirable, we have adopted it without waiting to ask if it would increase the cost of production. The really discriminating motorist will have the best possible car even if he must stint expenditure in other directions in order to attain his ambition. For this class we shall continue to cater. . . .

"There will be reductions of prices this year, but they will be due solely to the fact that the costs of material and labour are lower. They will not indicate any relaxation of the policy of aiming at the ideal. There is always room for the best. . . ."

We have always regarded owners of Lanchester cars as being among the elect. They are aristocrats in the motoring world, not merely because they can afford to pay approximately £2,000 for a chassis before they begin to think of the body that is to adorn it, but because their choice indicates the refinement of taste such as is shown by a connoisseur who will have on the walls of his home nothing but the work of the world's masters.

There are people of taste and wealth to whom most things are possible, and there are many with equally refined tastes but less ample means who can only gratify their desires with difficulty.

Mr. Hamilton Barnsley told us many remarkable stories of Lanchester enthusiasts who have worked and saved, and have made it the ambition of their lives to own these cars. The desire to possess the perfect car has been the ruling passion. They have not wished to own a £3,000 car merely for the sake of outward show, or in order to be in the fashion. They have desired it as a work of art



The lines of the American Moon car are more than normally pleasing to European eyes.

for their personal enjoyment and appreciation.

Some of these connoisseurs are hard workers in small businesses, toilers in the world, who have made motoring their one hobby. They have been frugal in order that they might attain their one desire. They love their cars, attend to them, drive them, will allow nobody to touch them but themselves, and would sacrifice anything rather than forgo the joy of owning what they regard as the most beautiful work of man.



A representative name in British automobile history is encompassed by the little word Star, which stands for reliability and sound service. The model illustrated is the 11.9 h.p. special four-seater—of very pleasing appearance.

These are the real enthusiasts, and among the names of princes, and other great ones of this world, numbered among the customers of the Lanchester Company, there are many names of humbler folk who have aspired to an ideal and have perhaps found more genuine pleasure in their hobby than those who have attained their desires more easily.

Any firm would be proud of the tremendous compliment paid by these true enthusiasts, and it is not

surprising that the Lanchester Company should regard some of these customers with affection. All artists like appreciation.

A feature of Lanchester cars which appeals especially to experienced motorists is the wonderful suspension. The veteran Mr. S. F. Edge recently took one of them on to Brooklands Track and proceeded to lap at over one hundred miles an hour. Anyone who has experienced anything approaching that speed on the track knows that the way of the racing motorist is hard

and bumpy. With many cars the speed is not limited so much by the mile-eating capacity of the machine as by the inability of the driver to withstand the terrific punishment of the blows inflicted by the road shocks, or shall we say track shocks?

After his 100 miles per hour run on the Lanchester, Mr. Edge wrote that if all cars had such perfect suspension he thought that doctors should recommend to people who suffer from insomnia a course of treatment consisting of being whirled round Brooklands Track until they were lulled into peaceful sleep by the smoothness of the gliding motion.

And now we can let our readers into a secret. Perhaps we had better put it

BETTER THAN PRE-WAR VALUE.

another way and say that we can give them a hint of some surprising news which may be expected before very long. It is that the famous 40 h.p. Lanchester may have a sister.

In this Peeping Tom business one has to observe a certain amount of discretion, and we must not tell all we know. We may say, however, that readers need not be very much astonished if the new model proves to be one of about 21 h.p. Exactly when it will appear is not known, for the Lanchester company is one of those who do not believe in binding themselves by the convention of producing novelties only at Showtime. They choose their own good time.

The smaller model, like the larger, will be designed for connoisseurs. It will appeal to people who want Lanchester quality, but who, owing to the present excessive taxation and other conditions which exist in these post-war times, desire to enjoy luxurious motoring at a somewhat lower cost than heretofore. The 21 h.p. Lanchester will be the owner-driver's automobile *de luxe*. It will embody most, though perhaps not quite all, of the features that have made the larger model world famous, and the quality of the workmanship will be the same.

Verbum sat sapienti, which, in spite of what the schoolboy said, does not mean that verbs are as good as a nod to a wise scholar.

Mr. Hamilton Barnsley drove us back to Birmingham station in his own Lanchester Saloon. He is one of those who drive their own cars, and that he enjoys doing so is obvious. Who would not enjoy driving a Cinderella coach like that?

MR. A. W. MCCORMACK IS AGGRESSIVE.

At the great works of Wolseley Motors, Ltd., we



The two-seater 13.9 h.p. Standard, which is now priced at £450.

found the always virile Mr. McCormack almost aggressively confident. He has no sympathy whatever with those who are disheartened by difficulties. He believes that golden days are approaching both for motorists and manufacturers.

"As to prices," he said, "motorists have not yet realised that ours are back to the pre-war standard. I mean literally, without taking into account the difference in the value of money. I go farther and say that the same amount of money at its face value will

price as he would have paid before the war for a less efficient one without the modern improvements. . . .

"What is the secret?" repeated Mr. McCormack, smiling. "I suppose a good many people would like to know. Well, a number of factors contribute to the result, but the chief one is that the directors of the company have decided upon an aggressive policy of attack on the markets. The new prices are based on the policy of increasing our output. We shall make more cars to sell at the lower prices.

It is better for our customers, and for the British industry, that there should be a big output of cars sold at a small margin of profit, than a small output sold at a big profit.

"Our facilities for production were increased enormously during the war. The works and equipment were growing all through that time of fierce activity. Now we have acres of machine tools, and a pressing plant which is, perhaps, unique. We mean to use our resources to the utmost by giving motorists the full advantage of the facilities we have for producing high-class work at the lowest possible price. . . ."

We glanced through a list of Wolseley cars, ranging from the little "Seven" two-seater, to the beautiful



SMARTNESS is the keynote of the 1923 Meteorite, as this model—a two-seater *de luxe*, with double dickey—illustrates. The price of £450 includes over £60 worth of high grade accessories.

THE VALUE OF RACING.

24/30 Town Landaulette *de luxe*, and we were forced to admit that Mr. McCormack's bold words were fully justified. The price of the little "Seven" has been reduced from £295 to £255, that of the "Ten" two-seater, fully equipped with electric lighting and starting outfit, from £475 to £380. Another remarkable example of the reduction of prices is the "Fifteen" four-seater touring car. In 1921 the price was £895, in 1922 £795, and the price of the 1923 model will be £650.

"Is there the possibility of further reductions?" we asked.

"Certainly not," replied Mr. McCormack. "Purchasers will really gain nothing by waiting. Those are rock-bottom prices, and they will not be reduced during the year. They are based upon an estimated output of ten thousand cars next year. At present we are turning out between one hundred and fifty cars a week, and are employing seven thousand people."

We learned many other secrets which will not be revealed to the general motoring public until the time of the Show. For example, there is to be a new light four-seater Wolseley "Ten" priced at £400 without, and £425 with self starter. It has been developed from the Torpedo model, and the wheelbase has been lengthened by 6 in. and the track by four. It is an attractive and economical small car which will have many admirers.

In order that prices may be kept as low as possible, the policy of standardisation will be carried a little farther. The colour of coachwork will not be optional, and no variations of equipment will be made at the option of the buyers. There will be no difficulty with regard to spare parts for the new "Fourteen" model, for the greater number are already standardised.

The policy of the Company will be approved by motor-owners, and the claim that prices are below pre-war level is fully justified.



A particularly attractive proposition is the Palladium, a model now resuscitated from many years' previous experience in this type of car.

THE SUNBEAM COMPANY BELIEVE IN RACING.

So far our efforts to obtain exclusive information had been successful. These peeps behind the scenes where the greatest spectacular production of the year is being staged became more and more interesting. We were talking with the authors, the stage managers, and those who will play the leading rôles. We were seeing the patient work, the rehearsals, all the thoughtful preparations that must be made before the curtain rises. If we had a visitor from Mars or some other world, and desired to send him

back with a good impression of the science and civilisation of Earthmen, we should take him to the Motor Exhibition, but we should like him to see also some of the vast factories, humming with activity, which make that Exhibition possible.

Yes, we should like our visitor from Mars to see the Sunbeam works, because, although we should wish him to have a good impression of Earthmen generally, we should like him to return with the fixed idea that in the matters of brains and craftsmanship the English are the best.

The Sunbeam Company believe in the moral, spiritual, and scientific improvements which are the results of fierce struggles for speed

supremacy.

Racing gave us overhead valves, lightened pistons and connecting rods, and higher all-round efficiency. Racing encouraged the study of metallurgy as applied to automobilism. Racing revealed faults which might have passed undetected for years if the gruelling test of speed had not shown unsuspected weakness. It is to racing that we owe our thoroughbreds.

We learned that the beautiful 24-60 h.p. Sunbeams will, if purchasers so desire, be fitted with brakes on all four wheels during the coming year. The general arrangements of the chassis remain practically unchanged. Detail improvements to Sunbeam models are made from time to time as they are proved to be of value. The makers do not hold back improvements in order to have something about which to talk at the Show. The results of experiments and experience are incorporated in the first possible series of chassis that may be passing through the works, irrespective of the time of the year. Thus, a Sunbeam bought just before the Show is not an out-of-date model in a few weeks.

The general tendency of late has been the lightening of all chassis, largely the result of racing experience.



THIS happy little party is evidently preparing for two good drives — one by the Austin Seven, and the other with their golf clubs!

Oct 2. 1922.

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Works : Hendon, N.W.

FROM COUNTER TO CORONET.



Adalbert Phipps was not exactly handsome, but something about him attracted attention—his legs, perhaps. He aspired above his humble station in the Notions; in fact, he had set his goal as the Ladies' Underwear Counter.



Though not exactly pretty, Lady Muriel Worcester had a face you could not forget, however hard you tried. When she saw Adalbert, her breath quickened. "I knew I'd forgotten the shrimps for dinner," she murmured.



That night our hero, pursuing his earnest studies in "Film Frolics," resolved to win the Lady Muriel. "By diligently knocking down thruppence on every sale, I shall soon be in a position to ask her hand," he soliloquised.



Fortune favoured him. Next Sunday, while strolling in the park, he heard cries for help. Stealing bravely from the scene he ran a mile without stopping; then he returned with a policeman. Lady Muriel was still breathing.



Invited to dinner, he more than held his own in the brilliant conversation. "Dammit, the beef's too rare" said the Duke. "Hairnets ain't what they was," said Adalbert. The Duchess and Lady Muriel said nothing.



But the Duke, seeing how Adalbert regarded his daughter, was anxious. Something must be done about it! He summoned all the other dukes in the family, and they agreed with him. But no one had any ideas. They never did have.



They need not have worried, for Adalbert's ardor did not cool. He proposed for Muriel. "Top hole," cried his Grace. "I'd begun to fear I'd never get the gal off my hands. She's a dud, but take her and God help you!"



Everyone was in good spirits at the wedding. Even the Dowager Countess of Weems, who had not made a pleasant remark for forty years, said that they were well matched. Her record is still unbroken.



Happy Adalbert! He won his promotion; twins came to bless his home; also the Duke and Duchess, hard hit by the income tax. "A jolly life," he often hisses of an evening. "What's that girl done with the dishmop?"

WHAT IS A FAIR GOLF HAZARD?

Golfers appear to have very divergent views on the question of the suitability—or otherwise—of tree hazards. In our last issue we gave the opinions of many of the leading amateur players, and now append a further selection, also incorporating the outlook of the long handicap man.

MR. SUTHERLAND PILCH pleads guilty to a 16 handicap. He is none the less very keen on the game, and shares the anti-tree hazard views of most of the experts. He writes:

SIR,—Is a tree a good hazard? Most emphatically no: at any rate, from the long handicap man's point of view, no hazard is good! I don't know why it is, but it seems to me wherever there is a tree hazard the long handicap man seems to be peculiarly fascinated by it. If he has never pulled a ball in his life, and the tree hazard is on the left of that elusive fairway, he will surely pull that ball. If by any chance a tree should be in the centre of the fairway, you can bet your sweet life that is the only hole at which the eighteen man would hit a straight one!

If the short handicap man ever strikes a tree hazard it seems to straighten up a pull or a slice, or it just stops the ball sufficiently to keep it out of the well-deserved bunker for which it was surely heading. But let the man who generally receives a stroke a hole and then a hiding, hit the tree and see what happens to his ball.

I should hate to think that the difference between the long and short handicap man was proportionate to the amount of luck experienced in dealing with tree hazards, but it comforts me with a handicap of sixteen to think that there may be something in the theory.

SUTHERLAND PILCH.

Capt. Aston is one of the exclusive army of plus players, and is more tolerant of the tree:

SIR,—The tree as a golf hazard is, in my opinion, both justifiable and desirable, providing it is employed in a reasonable and fair manner. It is objected to, as a rule, for one of two reasons. Firstly, there is a school of purists which holds that anything that cannot be found on the Old Course at St. Andrews is *ipso facto* unthinkable

in the game of golf. There are no trees at St. Andrews, and therefore the argument is that no tree has any right on a golf course. Secondly, the fact is that the tree is often a hazard of such frightful difficulty that it is held to be too heavy a penalisation.

My own view is that the tree as a hazard—i.e., something that is intended to be played *through* or *over*—is legitimate, but should be used sparingly. The reason is that the branches may easily prevent a proper swing being taken, and, moreover, the grass underneath may be so atrociously rough that it is extremely difficult to do more than just get the ball out. Hence, if I were a golf architect, I would only have trees where they would catch an inexcusably abominable shot—a shot so bad as to be deserving of heavy punishment.

When a tree is used to convert a straight hole into a dog-leg, it is not really a hazard at all, any more than "out-of-bounds" is a hazard. It is in these circumstances merely a very admirable sign-post. The player has no right to grumble if he neglects the warning.

If the fairways are reasonably wide trees make excellent boundaries on each side, but there should always be a "half-rough" between their trunks and the fairway proper. Mr. Colt's courses are, in my judgment, admirable examples of the tree hazard being treated in an intelligent manner.

WILFRED GORDON ASTON.

Mr. Percy Peters is one of the most enthusiastic of the long handicap players—and very dangerous on his present handicap!

SIR,—The controversy in your pages on tree hazards inspires me to express an opinion on behalf of indifferent players. If a scratch man condescended to play me a match and I won (*mirabile dictu*), that scratch man would pass on the half-crown with the remark that golf has gone to the devil.

The fact is the indifferent player does not count in golfing matters. He

is a criminal if he wins a match, and he is a fool if he expresses an opinion on golf course construction. Yet I enter my protest against this tendency to construct courses to suit the scratch men. If the architect will bear in mind the fact that a tree sometimes assists the poor player, he should retain it as a concession to that class. He will not, of course, because his sole ambition is to win the approval of the big men. All the same, sir, I hope you will publish this letter. It may do some good. *Litera scripta manet*. If you ask me to prove that trees help the poor and discomfit the good player, I am afraid I can only recount one experience. I played an overweening fellow, a 2 man, full of scorn for my play. At about the 15th, all square, I, in desperation, took a spoon, hit a long but low shot, and to my amazement it went through the tree on to the green.

PERCY PETERS.

Mr. P. C. Burton is numbered amongst the elect of the "tigers" of the game, and shares the anti-tree hazard views expressed by several expert players in our last issue:

SIR,—I am much interested in your "tree hazard" correspondence and the remarkable difference of opinion between expert players on this subject. Personally I am of the opinion that tree hazards are in nine cases out of ten bad hazards. In point of fact, on those courses where tree hazards do exist they are usually there because the owners of the property will not allow them to be cut down, and not because anyone wants them. Tree hazards are also bad in my opinion because of the unfairness of the incidence of the penalty—of two equally bad shots, one will be hopelessly trapped, while the other one bounces into the open on the fairway, an occurrence which good hazard making contrives to avoid. After all, golf was invented, I believe, at the seaside, and I know of no first-class seaside course where there are any tree hazards.

PERCY C. BURTON.

THE PROBLEMS OF GOLF HANDICAPPING.

There is no more difficult problem in the world of golf than the question of standard handicapping. In this article Mr. Charles Ambrose puts you wise as to the many ins and outs of this absorbing proposition. He also has something to say about the way the L.G.U. tackles this problem!

THE ideal way of handicapping a given match at golf is to arrange a good dinner, at which the principals and their supporters may all meet together and discuss terms freely and fully. It will be found that by the time the nuts and port have finished their last round, the exact proper odds will be perfectly clear to all present. The course chosen may suit one side better than the other; fighting spirit goes for much against superior physical power, or technical skill; all may depend upon the state of the course, which depends upon the weather; a good putter (like a good fieldsman at cricket) is worth his place on any side. All these considerations have their known value, and it is astonishing how accurately they may be balanced by the judicious award of a stroke or two. But this is dealing with a concrete case—a vastly different thing from the abstract problem every club committee has to tackle in handicapping its several hundreds of members; which, in turn, is child's play to the task St. Andrews have recently shouldered, of handicapping clubs themselves (there are now some thousands of golf clubs in the British Isles) by the allocation of a special "scratch score"—a sort of hybrid between "bogey" and "par," representing the average score a sound scratch player would return under normal conditions—to each of them. These scratch scores are arbitrarily fixed by representatives appointed by St. Andrews to administer various districts; the desired effect, of course, being to secure an even standard of handicapping throughout the country.

In theory it is admirable, but how it will work out in practice remains to be seen. In the "South-Eastern District," which includes London, Mr. Bernard

Darwin seems to have enquired what the "bogey" of a course might be, and then lopped off two strokes for the "scratch score." The immediate result of this was that most clubs put all their members "up two," and then, when the inevitable commotion followed (golfers generally loathe having their handicaps put back after years of toil in getting them down), they put them all down again. A case of "as you were."

In my own particular club, at Wor-

plesdon, with Messrs. Roger Wethered and de Montmorency back markers at +3, we did not think it necessary to make any change, although two strokes were struck off "bogey" here to make a "scratch score" of 77, which seems about right

But whether it is right to lump St. Andrews and the other championship courses together, and call them each 79, is a very doubtful point. It is also a very important point, because it is the foundation upon which the whole scheme rests. Many experienced players would back themselves to go round the Royal St. George's course at Sandwich, for example, in six strokes less than they would take, under similar conditions, over Westward Ho! But the scheme itself is sound, and if club committees will take their time and not risk wrecking it by rushing at it, it should prove an invaluable guide to them. We are particularly lucky, in this S.E. area, in having such an able and understanding golfer as Mr. Darwin in charge, and it is up to clubs to back him up, in a most difficult task, for their own sakes.

Mr. Darwin is a busy man, and naturally he cannot find time to visit all the courses he has to assess, so much of it has to be done by correspondence. Amongst scores of others, a nine-hole course on the northern end of Salisbury Plain (let us call it the West Muddleton Club) put forward a detailed claim for a scratch score. The greens, said the Secretary, were much more difficult than ordinary greens because they were all plantains, instead of grass. There was always a raging wind up there, and the only attention the course got was an occasional nibbling by wandering flocks of sheep. A man was engaged to "do" the greens on Wednesdays, but there was only one roller, and



Mr. Bernard Darwin, the famous golfer and "Times" correspondent, distinguished also as Vice-President of the Ladies' Golf Union.

ARE THE LADIES REALLY THE WEAKER SEX?

the course was very hilly in places. Anybody who got round under 40 was dashed lucky, but he would not do it twice. Could Mr. Darwin kindly allot him a scratch score, please? P.S. (Here came the rub!) Mr. Charles Ambrose played over the course ten years ago, and could tell you all about it, but there is a wireless station in the middle of it now.

Of course the next post brought the whole thing down on me, but eventually a scratch score of 76 or so was agreed, and published. Next came an indignant letter from the Chairman of the Handicapping Committee of the West Muddleton Club, protesting hotly against this most iniquitous assessment, which would simply destroy the whole handicapping organisation of the club. This also descended on me, with a despairing note from Mr. Darwin. I was still thinking over the situation, and wondering what to do, when a further postcard arrived from Mr. Darwin: "Situation explained," it ran; "there are apparently two West Muddleton Clubs!"

The weakness of this scheme, if one might venture to criticise it, is that it does not go far enough. It does cater, to some extent, for the score-player, and for handicapping committees who rely entirely upon "card and pencil" returns for their data. But it does very little to help the committee, which makes a point of playing with members so that it can handicap them upon personal knowledge of general form. That is considered by many golfers to be the best way of doing a difficult thing: witness the handicapping for the "Jubilee Vase" at St. Andrews, which is done in that way, especially for the occasion, every autumn; but it cannot be done unless the handicaps of the back-markers, by comparison with which all the others are fixed, are right. The difficulty in nearly all clubs is that there is some individual who specialises in pot-hunting, and goes on winning all the prizes until an exasperated committee saddles him with plus 5, or plus 6. He is not worth anything like that as a match player, and he should be given an ordinary handicap for ordinary use, and be made to carry a special penalty in stroke competitions. If he is put in his proper place in this fashion the whole problem becomes immensely simplified, for he is the man who is always trying to get his burden reduced so as to win more prizes, and always quoting So-and-so as having

beaten him—"playing level." We all know him, and none of us likes him much; but he upsets the handicapping.

Now suppose this difficulty to be cleared away by the introduction of a special score penalty in certain cases, how are golfers from Woking, arriving at Aldeburgh for a month's golf, to be fairly sure that they will find their handicaps about right as compared with those of the natives of Aldeburgh or visitors from Yorkshire at Aldeburgh?

St. Andrews have already got into touch with clubs by means of their "scratch-score" organisation, and I suggest that they should use this organisation to ask committees of championship clubs to see that all their members carry the same handicaps at all clubs to which they belong; and that committees of other clubs should be asked to see that their own handicaps are synchronised with those of members who happen also to belong to a championship club, or to a club which has been regulated by one.

All recognised golf clubs now possess competent secretaries, who might do very much more than they do to keep in touch with each other, and with Mr. Darwin and his colleagues, to report any change that is made; and it would not take long to get members themselves to understand that their handicaps at all clubs must be uniform.

Now let us turn from these rather easy-going masculine arrangements to something very much more concise—the provisions of the Ladies' Golf Union. The L.G.U. like to have everything in black and white. They issue a printed "Sheet," to be posted in the clubhouse, setting forth the conditions under which a lady's handicap may be obtained and maintained; and "Handicap Managers" are appointed—each in charge of a group of clubs—to see that these conditions are strictly observed.

"The chief features of the L.G.U. System of Handicapping are:—

"That the standard on which all handicaps are based is the play of a lady champion, and that the 'scratch score' of every course is fixed at the score which a lady champion could do under normal conditions when playing at her best, but allowing two putts for each green; that a player shall receive the same handicap in every club to which she may belong; that handicaps shall be given and subsequently adjusted on actual scores only, and not on general form; subject, however, to proper

"safeguards to prevent a player using a handicap that does not correctly represent her play."

Like a bee, the sting comes in the tail. These "safeguards" are rather drastic sometimes. For instance: "If the Handicap Manager has reliable information from the club committee, or from the circumstances under which the scores were done, that the player has not obtained a correct handicap, such player may be put on half handicap, notwithstanding the fact that she has returned 10 scores."! If that is not handicapping on general form with a vengeance we should very much like to know what it is.

But if men have perhaps not got the time, or the patience, to return 10 scores on the chance of getting half the handicap their returns apparently entitled them to (under the L.G.U. System), they might consider the adoption of a Ladies' rule which runs: "A member shall receive the same handicap at all clubs to which she may belong, such handicap to be the lowest gained at any club"; and their rules provide also that she is responsible for informing her "Handicap Manager" of any alteration in handicap at any "affiliated" club to which she may belong.

Occasionally, it must be confessed, the L.G.U. System produces surprising results. When Miss Wethered first beat Miss Cecil Leitch, in fair fight over 36 holes, for the English Ladies' Championship in 1920, Miss Leitch remained scratch, and Miss Wethered remained 4. Presumably it was impossible to reduce Miss Wethered's handicap until she had returned a number of cards to her "Handicap Manager," but one trembles to think what might have happened if Mr. Tolley, in winning the Amateur Championship in the same year, had been requested by his home club at Eastbourne to return 10 cards forthwith for a handicap!

It just shows how different the viewpoint of the sexes is, in some respects; but no man who knows anything at all about it has aught but a feeling of profound admiration for the devoted way in which these ladies give almost all their time and energy to their duties—duties which must at times be as unpleasant as they are arduous.

One final remark about our own men's handicaps: plus 3 is enough for anybody, and if it were fixed as the limit for, say, the reigning champion, it would give committees something tangible to go by.

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A black and white photograph of a golf course green. The green is in the foreground, showing some texture and shadows. In the background, there is a dense line of trees under a light sky. The overall scene is a typical golf course landscape.

GENTLEMEN.

I am sending you some photographs of the new course at Addington. Both the greens and the course are looking simply wonderful in spite of the fact that the seed was sown only some 14 days ago. I am writing to tell you how glad I am that I followed your advice in regard to the preparation and fertilisation of the soil. In the whole of my experience I have never seen seed come up better, or better seed, and so far nothing has come up that has not been sown.

Yours sincerely,

Yours sincerely,
(Signed) J. F. ABERCROMBY.

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A BEAUTIFUL INLAND COURSE.

THE FINEST LONG HOLE IN THE COUNTRY.

By Charles Ambrose.

In the title to this article on the many charms of the Worplesdon course, a bold claim is made on behalf of the famous eleventh hole. It is claimed to be the finest long hole in the country. Does anybody know a better?



A View of the Course from the Clubhouse Verandah. On a fine day there are many less pleasant places to take tea in.

THE history of the Worplesdon Golf Club may be divided, like ancient Gaul, into three parts. Founded some fifteen years ago, the course was opened with a great flourish of trumpets, as the first that had been specially designed for the (then) new rubber-cored ball, which had made most of the existing courses "look silly." It was only seven years old when the European crash came, and for the duration of the war practically nothing could be done to keep it up. The first three holes were put under hay; ditches and drains became blocked with roots and brambles; the greens were nothing but masses of weeds, and the bunkers choked up with silver birch, gorse, broom, and young pine trees. Add to this that the spring of 1919—when it fell to my lot to try to restore this jungle to something resembling a golf course—was a record wet one, and the state of the place may be imagined. It was just a tangled morass. However, as fast as the old greenmen were demobilised they set to work with a will, and on May 23rd, 1919, the first big golfing event after the war was organised and played over the course. Miss Cecil Leitch



THE Duke of Sutherland, President of the Club, takes the line of his putt. The Duke is a good natural golfer, with a fine free swing, as befits a sailor; and on his own course, at Sutton Place, he is very hard to beat.

led a team of ladies against Mr. Hilton's team of gentlemen; the course was reported to be quite playable in places, and so was started the third and present phase in the life of the Worplesdon Club.

Great changes have taken place recently in the control of the Club—in some cases distinctly for the better. Mr. Roger Wethered, for instance, has succeeded myself as Captain of the Club; his brilliant sister, the Open Champion, is Captain of the Ladies' Club, and the Duke of Sutherland is now President in place of Mr. Bonar Law. The new Secretary, Colonel Bunbury, discharges his duties with all the precision of a trained staff officer, and the professionals, the steward, and the greenkeeper are "post-war"; the latter has shown exceptional skill in the way he has nursed his greens round after the great drought, and they are now as good as any in the country.

The course was laid out by Willie Park; but it was constructed under the knowing eye of Mr. Abercromby, and it is easy to detect everywhere the characteristic touches of that master. Willie Park originally placed the bunkers with great severity, as the

A FAMOUS TEE-SHOT.



Putting on the 4th green, and driving to the 5th hole—a famous tee-shot, rewarding every yard stolen to the right.

old marks where some of them have been filled in still testify; but the boldness of his conception, with the subsequent clever revision of hazards by Mr. Abercromby (some of the tree hazards could hardly have been contrived by anybody else) have combined to produce a great test of golf. It was the first course Mr. Abercromby ever took a hand in, and many of us think it is his best. When Mr. Brunell, the artist who took the accompanying photographs, came down to take them, the question was not so much what he should take as what he might leave. Mr. Brunell is a man whose eye is trained to appreciate and halt at "beauty spots," and it was quite difficult to push him along past them to the sterner business of illustrating well-known shots and holes on the course. Eventually he took the 4th green, which has been remodelled drastically since last

year's Mixed Foursomes Tournament. The slope of the green was thought to be too steep, so the top half has been practically levelled, and the bunker at the back has been thrown into the green. The vast quantity of earth which had to be removed was piled at the back and planted with heather.

The golfers playing beyond the mound are driving up the 5th fairway, which is shown in the same photo. This hole is a "two-shot hole," and every yard that can be stolen closer to the heather on the right is of value, as the green lies slightly dog-leg to the right, and there is a concealed

pot-bunker on the near left edge of the green, which shuts the hole from the less courageous player who has driven anywhere the least bit to the left of the centre of the course. This slightly dog-leg shape is typical of several of the best holes on the course. The more accurate you are in placing your tee-shot the easier your second becomes; but if you elect to "play safe" with your drive, then you must be prepared to play a proportionately good second to make up for it—or be content to take 3 to reach the green.

The next page photo shows a golfer about to play his approach to



THE downhill approach to the 6th green. Quite 99% of players are short to it with their seconds, and it is the rarest thing possible to see it over-run. The Clubhouse is seen in the distance.

A DIFFICULT APPROACH.



To negotiate the difficult approach to the narrow plateau at the 8th hole is a particularly intriguing shot.

the much-discussed plateau green at the 8th hole. If he hits his drive straight up the middle of the course he has to approach the narrow plateau "broadside on": a most difficult shot, involving great risk of running over into dreadful trouble beyond. But if he hugs the right wing-bunker, or, better still, if he carries it with his drive, he gets a diagonal run-up to the hole from the right, which is comparatively easy.

The 10th (Pond) hole is a pretty little hole, and the 11th has been described by Mr. Darwin as the finest long hole he knows. The way cunning local folk play it is to put the tee shot well away to the left; thence an oblique brassie-shot—across the bows, so to speak, of the awkward bunker frowning at the top of the next hill, ready to catch any imperfect "second"—will open up the hole in such a fashion that the approach might be played with an

umbrella. But the first two shots must be accurate, and they must be long—for the hole measures 530 yards—if the player wants to make reasonably sure of his 5; though "Bogey" does allow him 6.

Perhaps the chief characteristic of the Worpleston Course is its com-

parative kindness to the poor player. A short shot, provided it is straight, is never in trouble. But the bunkers, though they are few, are placed with such fiendish precision that an indifferent shot played by a good player seldom escapes punishment: nothing but a thoroughly good or a thoroughly

bad stroke gets off, the idea being that a very bad shot brings its own punishment through loss of distance. A great golfer once modestly said that one must be really good to understand how difficult Worpleston can be!

In a few days—on October 23rd, 24th, 25th and 26th—the "Worpleston Mixed Foursomes" will be in full swing. The credit for their inception belongs really to Mr. Bernard Darwin. Last year we were discussing the "Men v. Women" contest which had just been waged at Stoke Poges, and the great difficulty of finding anything like a satisfactory basis for handi-



THE "Pond" hole: short and sweet, but perhaps not so easy as it looks. Last year's drought completely dried it up, but it is full of water again now, and it is no longer safe to duff your shot into it!

THE FINEST LONG HOLE IN THE COUNTRY



The long 11th hole, which has been described by Mr. Darwin as the finest long hole he knows.

capping the men. Mr. Darwin, who is THE expert in these matters, thought that if men and women wanted to play together they had better do so in foursomes; and he wondered why it had never been done. So the Worplesdon Club made tentative inquiries, and the response from the first few big golfers approached was so encouraging that the success of the experiment was speedily assured. It was thought that the redoubtable Wethereds, brother and sister, entering as a pair, might put others off; but not a bit of it—everybody wanted to play with them, not minding a beating in the least; and in the end T. A. Torrance and Miss Helme covered themselves with glory by actually defeating them.

Golfers who know Worplesdon will realise what the standard of play in the final was like when they hear that the winners were only one

stroke over "fours" at the 16th hole, where the match finished. That is the kind of form a first-class professional, playing well, is expected to show. It was achieved by the ideal combination of Mr. Torrance's powerful play with Miss Helme's wonderful putting.

But this year the Wethereds will

take more holding than ever. The holders, Mr. Torrance and Miss Helme, are, of course, defending their hard-earned title, and Mr. Tolley is entering the lists with Miss Bastin, the French champion, who is his feminine counterpart as a fighter. Mr. Darwin and Mrs. Macbeth are good enough, on

their day, to beat anybody, and there are a dozen other couples in who might win. Mr. Robert Harris, Major C. K. Hutchison, Lord Charles Hope and Miss Grant-Suttie are all competing.

Complaints are often heard that the Worplesdon Course is difficult for motorists to find. The easiest way to get there from London is to run straight down the Portsmouth Road to Guildford, and then take the Bagshot Road for a distance of 5 miles. There are shorter routes, but they are not easy to describe, and the roads are not so good as the Portsmouth Road.



THE horseshoe bunker guarding the green at the short 13th hole; a hole which is said to have been reproduced in facsimile in America. When visitors first see the great big green, and are handed irons by their caddies, they sometimes smile—but not for long.

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All Paige prices have been reduced - why then wait for the Show?

YOU CAN FIT IT TO YOUR CAR!

WIRELESS WORRIES AND WISDOM.

In a way, these early days of wireless activity are akin to the pioneer days of the motor movement. There must be difficulties, and we know that they need careful thought. Yet legislative progress is almost unduly slow. In the meantime there is any amount of amusement to be obtained by the purchase of even an inexpensive set.

IT is suggested, and even by those who have had some experience with apparatus, that wireless telephony is only a passing craze, and that in due course it will peter out. There appears to be some truth in this assumption—until one considers the present position of wireless in Great Britain. At the commencement of this year only a few enthusiasts were operating receivers, and in truth they had nothing much to receive, beyond a weekly concert by the Marconi Company and the Hague concert on Sunday afternoons, which is frequently difficult to receive on "moderately powered" receivers.

Then followed the boom, and the promise of a regular broadcast service throughout the country. This tickled the fancy of many thousands, who saw in the wireless telephone something considerably more interesting from a musical point of view than the electrophone or even the gramophone. Several months have passed since the broadcasting services were first mooted in the spring, and at the moment it seems unlikely that a broadcasting service will materialise before we are well into the winter.

Frankly, wireless telephony would never be a really attractive proposition on what has been receivable during the past three or four months, and at the moment thousands of receiving licence holders really have a "fed up" feeling, and are seriously wondering whether the various manufacturers who propose to run the Broadcasting Company, and the Postmaster-General, will ever come to terms, and make a start. Apart from the commercial aspect of the matter, there is also the legislative side. The General Post Office, as is well known, holds an absolute monopoly in this country on all methods of communication by post, telegraph, telephone, and wireless telephony and telegraphy. The Postmaster-General, however, happens to be a live Cabinet Minister who is taking a very broad view of the wireless situation, and recognises that the

public should have facilities for enjoying to the fullest possible extent the latest scientific, and musical, toy—the wireless receiver.

It is to be hoped that, assuming a broadcasting agreement is arrived at, the Government will refrain from "strangling" (or perhaps the better word would be "jamming") the development of wireless telephony by unnecessary restrictions. In a way, the position of wireless to-day is very similar to that of motoring before the red flag was abolished, and it behoves those, particularly the Wireless Society of London, who are looking after the interests of wireless amateurs, to see that we have a reasonable amount of liberty in operating our apparatus. If this matter is not carefully watched, we may find that the expense incurred in setting up a receiving station will not be worth while owing to restrictive rules enforced by the authorities.

Everybody who has had any experience in wireless recognises that we must be "governed" in some way, otherwise there will be nothing but chaos and "cat-calls" in the air, rendering enjoyment of the music tapped from the ether simply impossible. At the same time, any necessary regulations should, especially in these early days, be of such flexibility that progress and further development will not be unduly retarded.

President Lincoln, long before he was elected to his high office, is credited with having made the following comment on laws and constitutions:—"The law and the constitution are like a child's pants; they've got to be made wider and longer as the child grows, so as to fit him. If they're kept too tight he'll burst them, and if you are in a hurry and make them too big, all at once, they'll trip him up." In just the same way it is essential that we have wireless laws, as applicable to amateurs, which will "fit" us comfortably, and the

authorities should be ready at all times to extend our facilities as and when such extensions become possible. While the present Postmaster-General is in office it may be assumed that a reasonable official attitude may be looked for, but, this notwithstanding, it is really time that some definite programme had been arrived at.

As soon as a satisfactory broadcasting programme is started, the writer believes that wireless telephony will have many adherents. Even to-day, when nobody knows exactly what they may really expect to receive, over 1,000 applications for receiving licences are being handled weekly by the General Post Office, and it is safe to assume that after the broadcasting has commenced this figure may be trebled. As to whether the "craze," or whatever else it may be called, will last, that depends mainly upon the quality of the broadcasts, and upon one or two other matters which may here be referred to.

It was reported that the concerns interested in the broadcasting company were determined to ensure that only receivers manufactured by themselves, or licensed by them, shall be entitled to be used for "listening-in." If the Postmaster-General agrees to the creation of such a monopoly (and, so far, he has not), it will mean that the interest of the public in wireless generally will be considerably curtailed, for whereas one enthusiast will not mind paying out upwards of £30 for a ready-made instrument, another—especially if he has a mechanical bent—will object to pay that amount if he can obtain an equivalent machine from another maker, unlicensed, at two-thirds the price; or, alternatively, can assemble an equivalent set from parts, at home, at a cost of possibly one-third of the licensed manufacturer's figure. While this rumour is current it is undoubtedly preventing many from buying apparatus from firms outside what has been termed "the ring," and has put a damper on the big trade which was being done in the sale of the parts

THE WHY AND WHEREFORE OF WIRELESS.

necessary for the assembling of panels, condensers, etc.

The General Post Office is now insisting upon the elimination of the two-coil tuning system in order to prevent, as far as possible, oscillations by valve receivers which can create such a din in the ether, often rendering reception almost impossible. This restriction will be vigorously enforced in regard to receivers held by "broadcast" licensees, but experimental licensees are to have some freedom, outside the broadcasting wave lengths.

For the benefit of those who are beginners in wireless, it may be explained that in the three-coil tuning system the aerial and the earth leads are connected up to the ends of one coil—the primary, which establishes connection with the receiver solely by inductance with a second coil, termed the secondary, which in turn is "reacted" upon by a third coil. With the two-coil system both coils are definitely connected by leads to the circuits in the receiver. Naturally results are quicker with this circuit than the circuit which is "loosely coupled," but only "air hogs" or persons having no understanding of wireless principles would cause unnecessary oscillation.

It will have been noticed by those who closely watch wireless developments that one or two of the prominent makers of receivers are issuing warnings through their advertisements that the three-coil system of tuning is compulsory. The forms of applications now being issued by the G.P.O. confirm these warnings.

Conflicting interests are responsible for much of the delay which has occurred, but in view of the fact that the General Post Office has already collected a very large sum from licence holders, a definite statement of what they may or may not do is clearly due to them. Instead of which we are still groping in the dark and wondering whether an unsurmountable obstacle will put an end

to the broadcasting programme, or, on the other hand, whether many of our sets, not marked as "approved" by the G.P.O., will, later on, be prohibited and rendered useless.

If the majority of licensees, who will have to be contented with "Broadcasting" machines, are to be tied down to a standard type of apparatus, much of the fun and amusement they are anticipating from wireless will vanish. The majority of receiving licence holders are not taking up wireless as one buys a gramophone—which merely entails, in operation, the placing of a record on a turntable and the turning of a handle. The attraction of wireless is its mystery, also the fact that we are undoubtedly at the beginning of things. It is difficult to anticipate what will be the efficiency of an average receiver a year hence, and as we are in the experimental era many users will be unable to resist the fascinations of experimental work.

Recently, for example, definite information arrived in this country concerning the wonderful results obtained in America from the "Armstrong super-regenerative circuit," with the result that many English amateurs are busily engaged in trying to assemble

Armstrong receivers. So far only a few have succeeded in obtaining good results, owing to the lack of rather vital details concerning the measurements, etc., of windings and such-like.

Those who already have their experimental licences will congratulate themselves upon making early application, for, from now on, these licences will only be granted to those who can satisfy the G.P.O. regarding (a) scientific qualifications, (b) particulars of any experience in working wireless apparatus, and (c) particulars of any certificates of proficiency in radiotelegraphy from the Postmaster-General, and service in wireless branches of Navy, Army, or Air Force. Such are the qualifications now necessary for experimental wireless amateurs, and it is evident that only the few will be able to avoid the less interesting Broadcasting Licences. With regard to the latter licences, the writer has just seen a G.P.O. notice that "broadcast licences" cannot be granted until the broadcasting arrangements are settled. This will be disappointing news to thousands of waiting applicants.

* * *

As we go to press a pleasant surprise has been sprung upon those who anticipated that broadcast receivers would be confined to a very limited range, for receivers, capable of receiving signals on *any wave length*, are now, we understand, to be permitted. The variations in construction which will be allowed in a single container—which must, of course, be approved by the Postmaster-General—are either (1) a combined tuner and rectifier, (2) a combined tuner with high frequency amplifier and rectifier, or (3) an audio frequency amplifier (on valve or other type). Any combination of two or three of these separate units will be allowed, but no "broadcast" receiver must be capable of causing oscillation.



Above is illustrated an extremely neat wireless cabinet, suitable for fitting to one's car, and capable of receiving broadcast. Designed by Messrs. Burndebt, it contains the valve equipment; measures 10 in. by 14 in., and weighs only 7 lb.

"FRAILITY!—THY NAME IS WOMAN!"

M A T T E R S O F F E M I N I N E M O M E N T.

The average lady motor-owner has to think of many matters other than her car. There are household questions—and dress, that little word which means so much. A few of the new suggestions are offered here for the lady motorist of normal dress allowance, and on the next pages are to be found the last words in fashion for the lucky ones with more or less limitless purse strings.

THE time has come, the Walrus said, to think of many things"—of shoes, and frocks, and camouflage, and little hats with wings! But reverting to the original version of the story, who does not rejoice in the return to the household menu of our friends, the oysters, . . . with whom, like the Walrus, "we deeply sympathise."

Still, it is sad to feel that the summer is over—also the holiday season out of which we seem to have been a little cheated this year. We have one last reluctant look at the dear old heather clad hills, and the tranquillity of our favourite salmon pool. They must be, as Sir James Barrie has it, "our roses in December," and we must return to our daily round; and for many women, not the least part thereof is the inevitable contemplation of daily meals! Once again we face the problem of beef or mutton, or the search for a new sweet—since cook's inspiration never gets further than "apple charlotte, ma'am!" a thought that she appears to derive from gazing up at the kitchen ceiling for quite three minutes.

To tackle domesticity in these after-war days and *not* get to look like the saucepans or the tea-cosy oneself is a real art, but to feel nice is the first step on the road to looking nice—and being attractive! In a world of realities a woman's brains are like charity, and should begin at home . . . on her personal appearance!

In taking stock of the after-holiday wardrobe, one is usually appalled at the débris that one seems to have collected, and yet, with the early fashions being "tried out," the woman with a moderate dress allowance does well to follow the political motto, "wait and see," since modes that succeed in Paris are not invariably suited to the Englishwoman. In the meantime, however, we can turn our attention to those innumerable details—the trifles—that are the keynote of good dressing, for the Englishwoman has long since advanced beyond her grandmother, whose chief idea on such

matters was "a little something for the neck, dear."

The long waist has reached its nadir, and though still at a low level is slowly tending upwards again, but while skirts are so long and panelled or draped, it is unlikely that they will change in very marked degree, unless to increase in width. The short fur coats—happy issue from many difficulties—also emphasise the silhouette to which we have grown accustomed. For these last, caracul seems a particularly successful fur, while for stoles and muffs, fox will be one of the most popular again.

This season, however, will see a pleasant breaking away from the tradition of the last nine months in the matter of colour, and in hats at any rate fresh enterprise has developed. The outburst of early autumn models in coque and other dyed feathers shows a definite trend towards blues and violets, as well as the darker shades, that are particularly chic for wearing with the morning tailor-made, and are invaluable for the business woman.

This is undoubtedly to be a "woolly" season. Having determinedly set her face against the nasty thick undies of her childhood's days, the modern Eve has yet to guard against the devastating possibilities of a red rose, and achieves it—*pour le moment*—by wearing knitted frocks, jumpers, and suits. The last word in jumpers is made of a fine merino wool, knitted in lace stitch, but lined with a contrasting shade of the same material, giving a solid but two-colour effect. The wool coat and skirt is delightful in its freedom and comfort—but a trap for the unwary. Nothing can look more smart—or less! The secret of the former lies in the selection of a close knit model, that will neither drop nor "bulge," or even catch on one's wrist watch, brooch, or the door of the car. The marled effect is perhaps the latest and most becoming design, and certainly for the woman who plays golf it is a good plan to choose the cardigan shaped coat, thereby dispensing with that doubtful

blessing, the sash. The variety, however, is almost endless, and prices vary from two guineas to ten.

As in Paris one finds that the essence of quality and style for men's apparel is usually labelled, "de Londres," so we must admit that in the feminine world, there are still a number of points where London is a long way behind Paris. The three most noticeable perhaps are corsets, "undies" and shoes. Whereas in England we have long since waked up to the use of crêpe de Chine, silk, and georgette, of the finest quality, a little tour round the leading Paris houses compels one reluctantly to admit that even in their cheaper models there is a daintiness, a chic, and lack of "heaviness" both in cut and design that we rarely achieve over here. Their use of net and drawn threadwork may be cited as examples of the latter, and yet the essence of simplicity is maintained.

The same thing may be said of footwear. It is in "ligne" that the French shoe triumphs; that subtle curve under the instep giving a depth to the tread which enables the wearer to walk gracefully and in comfort despite the highest of heels. In the latest models it may be noted that the sandal shapes are less conspicuous, and have given place to the return of tongues and even buckles, while others have coloured stitching, or are trimmed with strappings of white on patent leather, a style that is as decorative as it is becoming.

A very good example of French chic combined with simplicity was recently shown in a little French model frock. It was of black "gros de soie"; the hem of the skirt, nearly four yards wide, was finished in broad petals; the long-waisted corsage finished severely in a "bateau" neck, without trimming. But the decor lay in a crepe de chine streamer threaded through the short sleeve and décolletage, à la bébé, and in the alliance of crepe de chine and taffetas of contrasting shades which formed the spray of gardenias on the left side of the skirt below the waist.

"FASHION—LEADER OF A CHATTERING TRAIN



Godet pleats are a strikingly novel feature of the new modes, and the photograph shows a tailor-made costume with these pleats set in front and back of the coat, a small yoke at the sides keeping the lines of the coat very slim and flat on the hips. The shaped flounce and long roll collar and cuffs are of fox fur, and the costume is carried out in smoke-grey wool gabardine. The hat is of black velvet.

This little model hat is made of grey suede leather and is trimmed with grey ribbon edged with gold—the ribbon being wonderfully interlaced into a thick ruche round the brim and crown.



WHOM MAN, TO HIS OWN HURT, PERMITS TO REIGN."

Most designers are concealing the amplitude of material demanded by the newest models, by drawing the fullness to the front or sides, allowing it to fall in graceful lines to the ground, as depicted by this gown of brick red crêpe romaine. The plain back shows a cape hanging to the waist line, which is defined by a girdle of gold tissue ornamented with steel beads. The hat, with its draped crown and large bow, is of nigger brown velvet.

Black and silver is the favourite combination for our autumn millinery, and here is the latest example from Paris. This model is made with soft folds of black velvet swathed with silver tissue.



"IT STANDS ON RECORD, THAT IN RICHARD'S TIMES,
A MAN WAS HANGED—FOR VERY HONEST RHYMES" (POPE).

In days long since gone by—the days before Revue,
'Fore war, or car, or Flood—I leave the choice to you,
We took our pleasures sadly; always liked to know
Long before we saw it, all about the Show;
But nowadays methinks, 'tis always *comme il faut*,
To sit in ignorance— and not to know a *mot*!
To wot not of the feast, e'en entrée, joint, or sweet
But just to take a seat—and Fate provide the meat!

Prologue

I like the old ways best, so tell you now the Plot:
What's Behind the Curtain—or else, perchance is not,
Of all the Wonder Things, that next year are to be
Automobile Features, of nineteen twenty three.
Novelties outstanding; and new things much the
same " " "
As in the days gone by—except, of course, in name!
Accessories and Cars, and all that makes them go,
And everything, in fact, that fills the Motor Show.

And yet as 'tis a fact, "Tradition loves to stay,"
(Though Prologue used to do, what Compère does
to-day),
A Nephew young and gay, steps out before the screen,
To tell his Uncle *now*, the things that will be seen;
And primed with all the news, he wanders on his way,
So Ring the Curtain up, and ask the band to play.
He tells of many things, of tit-bits here and there
Of matters great and small, and trivial and rare.

And now a final word, soft whisper'd in your ear,
Let's hope for better times, next automobile year,
Good luck to one and all, and may this Motor Show
To Trade stagnation deal, the final crushing blow.
To Public and to Trade, I (Prologue) wish to say,
Better times are coming. An optimistic lay?
But justified methinks, by everything I know
Of automobile trend, and values at the Show.

Compère

Commère

WHAT WILL THE SHOW REVEAL?

OWEN JOHN LLEWELLYN AS THE NEPHEW.

MY DEAR UNCLE,—
Yours is a happy life—or ought to be. It is only we poor fellows who live in London who are never satisfied. Your old "bus"—(I am not responsible for the extraordinary name that everybody in the trade calls his car nowadays—I suppose it began, where a whole new language did, in the Air Force)—does everything that you want a car to do; never lets you down, and always comes home to tea or else takes you out to dinner and brings you back again: which, as you would put it, is all that a man can want a car for.

And I am not quite sure that you are not quite right. We, like those Greek johnnies in the days when Greece was Greece and not an always-running-over, melting mess, are always looking for some new thing in motors: we don't know what we want, and we aren't happy until we get it—and then we want for something else. When my ship comes home and I retire into the calm and peaceful depths of the country—some place where the newspapers don't come until you like to fetch them is my idea of bliss—I shall look upon and use a car just like you do: to fetch and to carry, to take me there and bring me back, a beast of burden pure and simple. Happy times! but not for me—just yet.

Therefore, and all the more readily because even you do seem still to want the best and latest things sometimes, I am out to fill you full of the demon of unrest, to make you jealous, to unsatisfy you, and to keep you up to the mark as to all that is going on in the newest of new worlds that a certain philosopher in the motor Press once called "Motordom."

This world has "politics" of its own, and more different parties than even the House of Commons. Some people say that its divisions are more like those of the happy Victorian times, when every little boy and girl alive was born labelled: honestly, I am not sure that they are not very near the mark, for blow me if I can see exactly how and where the two big organisations that never cease protesting that they are the only friends of motorists, differ in their advertised intentions and desires to benefit humanity on wheels. Perhaps just now—(I have got into the middle of motor politics with a jump, and I may as well go on explaining the unexplainable)—the bigger, or richer, of the two is arousing mild suspicions among ordinary motorists for its

flirtations with the Heavy Brigade—that is, with trying to run with the runabout and hunt with its bitter rival, the motor-lorry, at the same time. All things to all men is all very well as long as both parties don't happen to meet in the same *boudoir*; then it is that the fur starts to fly: and already in some districts original members are beginning to scratch their heads to make sure that they did not grow the feathers that are impelling the steel, in the shape of the protection afforded to road monsters that are rendering some ordinary roads almost impossible.

You see, Uncle, this mighty organisation includes owners of all kinds of motor vehicles; and what is good for one is by no means the best for the other. However, we shall see what we shall see; there are plenty of critics about; and the best policy probably will be to follow the side of the big battalions that subscribe the most.

The motor taxation question is still with us, and probably ever will be. It's an ill wind that blows nobody any good, and what is sauce for the ten-thousand-mile gander seems to be cayenne for the stay-at-home goose. You can almost size up the matter in proverbs; the only thing one can be quite sure about is that, whatever happens, somebody will be annoyed. No doubt motor taxation as it exists at present is the limit in unfairness; but shift it as you will—on fuel, on tyres, or on cost of car—somebody is bound to grumble: the only real solution—and, of course, it being a fair one, it is beyond the bounds of practical politics—is not to tax transport at all, and to get the money from exactly the same people in entirely different ways. Sweeping, no doubt, but just think of the justice of it all! Of course, we shall never get it in this world; we are much more likely to see the good old turnpike gates revived once more.

But this mournful question is no manner of news to you; people in the country have lots more time than we have to grumble over the same taxes, and even to write to the papers about it all. Now, let's talk about The Show, and I'll see if I can't persuade even you to come up to town for it.

It is going to be a very big Show indeed; nobody can afford to miss it; and, because of our pleasant habit of doing to our neighbours just as well as to ourselves, it is certain to be far more international than any show anywhere else. It is also going to have

a brand-new feature, too; public interest is likely to settle for the first time on small cars instead of on big ones; the giants will be there, of course, but on many of the same stands as these will be found younger brothers and sisters of the same family, machines that we may be sure will follow in the same fine footsteps, and probably be able to get along the roads almost as quick. But not quite so comfortably.

I am in doubt just at present concerning the future of the little air-cooled cars that made such a splash last year (splash doesn't seem quite the right word, but you know what I mean). They are as good as—or better than—ever, but the great gulf in price that was one of their largest claims to fame and notice does not separate them as it did from the little water-cooled motors, while in the matter of elegance, apart from pace, they do not score. Women drive such a lot now, and they do like a car that just ticks over and purrs when it is not going along—I never yet came across a female who admired the roar of engines as does the true motor "nut." However, there is room for both. In the air-cooled division we have the world to ourselves, and, in the matter of lasting, the prophets who said they would all shake themselves to pieces seem as wrong as most prophets are to-day in every other line of business.

Motor fashion is a curious thing, though I doubt if in far, fair Devonshire you notice its variations as we do. And yet, as I remember Devonshire in my early youth, you were all very particular about the turn-out of your carriages and horses: how is it, I wonder, that quite respectable folk down in such parts are still content with antique cars that are equivalents of the hired shoddy wagonettes that used to be the only public conveyances? Motor fashion in London is a reality, and just now it seems to have set in towards neat British coupé cars. One does not see—Lizzie excepted, of course—half the Yankees that one used to meet, though I allow that in the country they seem more abundant than ever: not that I have a word to say against them as value for money. There are no better when new, and no firms have better agents or "services" than have the big plate-glass people of Great Portland Street and lots of other places.

When you *do* come, Uncle, for Ascot and Lord's and old-fashioned things

WHAT REALLY CAUSES EXHIBITION HEADACHE?

like that, I remember that you also frequent Tattersalls, though I doubt if you spend much money there yourself. And quite right; it is the proper thing to do, and also it gives you a lead as to what good gee-gees are fetching. Persevere, *mon oncle*, but also step a few hundred yards down the street and visit Beauforts, the Motor Tattersalls during a race, a place run on the same lines and an equally sound barometer of the prices of automobiles. You needn't buy—unless you want to—but it helps your judgment, and I think that you will come away agreeing with me that, in buying a new car, a very sound rule is only to purchase one that has a good second-hand selling value. There is no need to mention names: cars that are flashes in the pan, temporary stop-gaps for deferred productions, cars that are obviously built on the cheap, all fetch nothing next year; while there is nothing that breaks your heart or makes you more angry than owning a machine for which spare parts and renewals are absolutely unprocureable. I could give you lots of names—but I won't.

It is very sad about the White City; and I hear that exhibitors who are again to be outside the magic portals of Olympia are furious and meditating all sorts of awful things. After all the talk about the new Olympia annexe, too one might have thought that the British working man and his employers could have got a job like that through, even if they had to work overtime. However, Shepherd's Bush has many good points: for one thing, it is less crowded out with coach work, excellent stuff, but often very much like what one can see in the street; for another, there are less

distractions to annoy anyone keen to look into a new chassis or invention; and, for another, it is sure to have more novelties on its stands than Olympia will have, for the reason that new men and new matters have no option but to go where they are told. See Olympia, but don't leave out the White City; probably the features of five years are far more likely to be there than in the original Exhibition. Besides, the little charabanc ride between the two places is very good for getting rid of what has come to be known as Exhibition Headache, though this may often be owing as much to what is behind the stands as upon them.

By the way, though I expect it is stale news even to you, book not only your seats but also your beds and your bedrooms well in advance if

you do come up. The Motor Show is a "season" of its own; it fills the hotels, it crowds the theatres, and it even has an effect on the trains. Somebody with a passion for statistics—the sort of chap who takes a census of vehicles in Trafalgar Square, for instance—ought to work out the extra population that accrues to London town in Show week; it would be an eye-opener to the blind folk who still look on motors as the playthings of the few. Playthings of the few, indeed! Motors and motoring are the world's next big business to agriculture, and between them they are paying for all the roads of Great Britain.

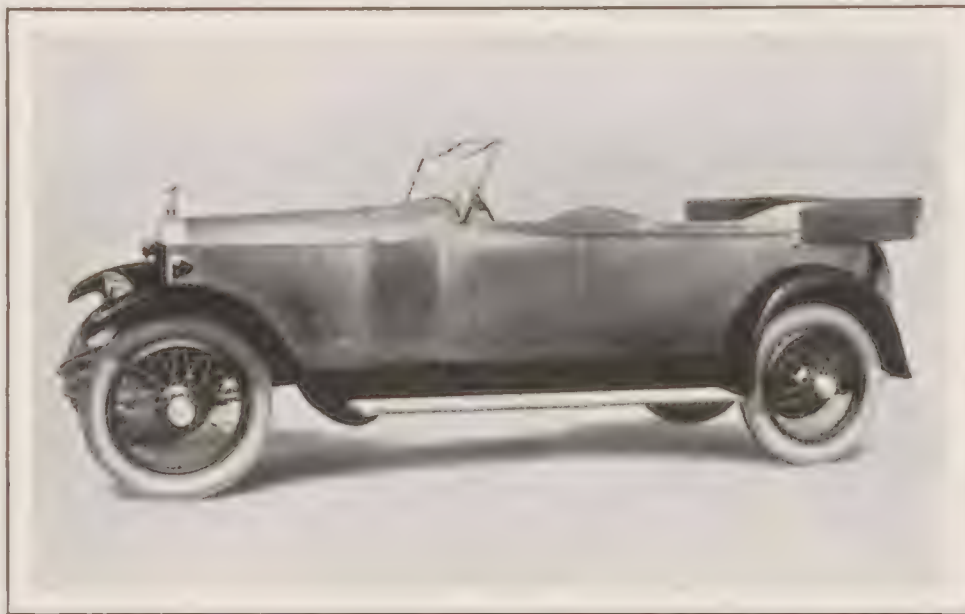
How the movement grows next month's big Exhibition will tell us; it is the saddest of reflections to realize that even when the new annexe to Olympia is open, this country has not anything like a decent exhibition hall in any way worthy of the contents we could stage inside one.

France has in its *Grand Palais* a building that is an attraction in itself—nobody could say that of Olympia. More than a dozen years back a funny man in *The Autocar* wrote that it reminded him of the back view of an elephant grazing in a brickyard; and, 'pon my soul, the same animal seems still to be doing exactly the same thing, in the same place, to-day!

My love to my Aunt, and tell her to come too; nowadays there are as many women who drive as men, and there will be lots for her to enjoy. I'll tell them to put down the matting again. Olympia without it is the chiropodist's idea of Heaven.

Good-bye—your affectionate nephew,
CHARLES.

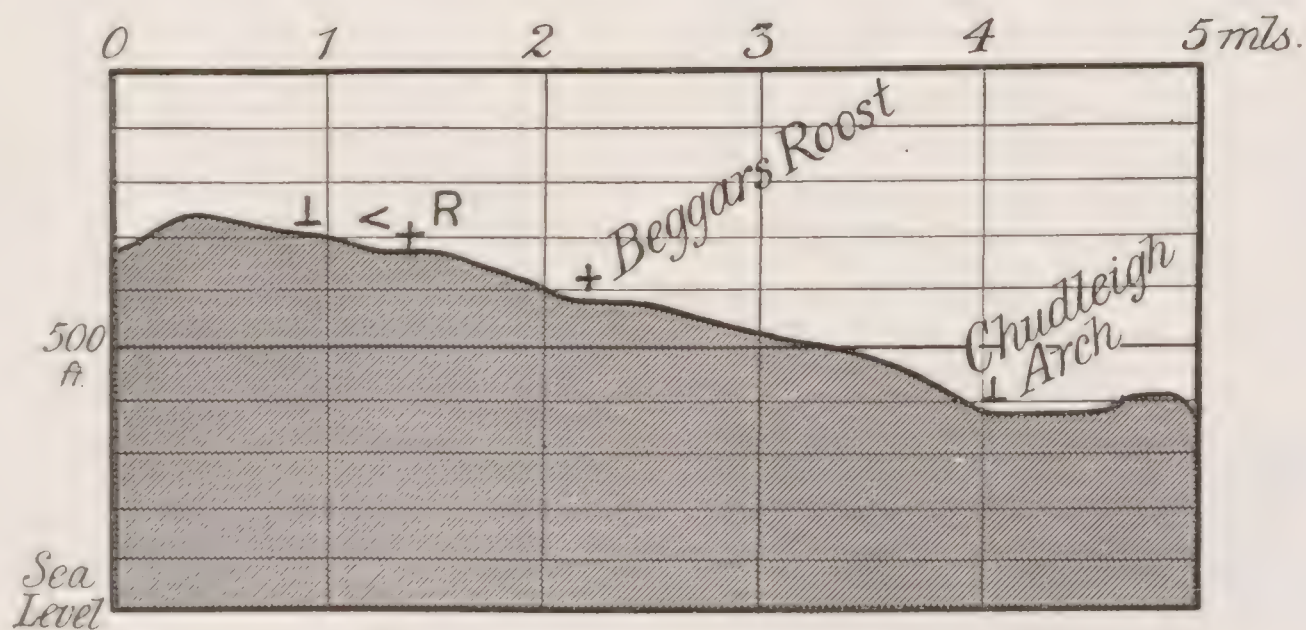
P.S.—Thank goodness, petrol is down, eh?



THE new 20 h.p. Rolls-Royce, like the more powerful model—the 40/50 h.p.—is a wonderful combination of first-class material and extreme care in manufacture. It is not claimed that it will provide the luxury of riding and accommodation which is offered by the famous 40/50 h.p., but it has all the essential qualities of a Roll-Royce product and carries the usual three years' guarantee. Briefly its specification is:—an engine with a bore and stroke of 3" by 5" (R.A.C. Rating 21.6 h.p.); overhead valves and battery ignition; three-point suspension with semi-elliptic springs front and rear, with Dunlop detachable wire wheels which are mounted on the axle tube; a single dry-plate clutch, with a three-speed gear-box and centrally placed levers. Complete with tyres and battery the weight of the chassis is 2,020 bs., while £1,100 is the price of the chassis.

HILLS OF BRITAIN

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SOUTH AFRICAN HOLIDAY RESORTS

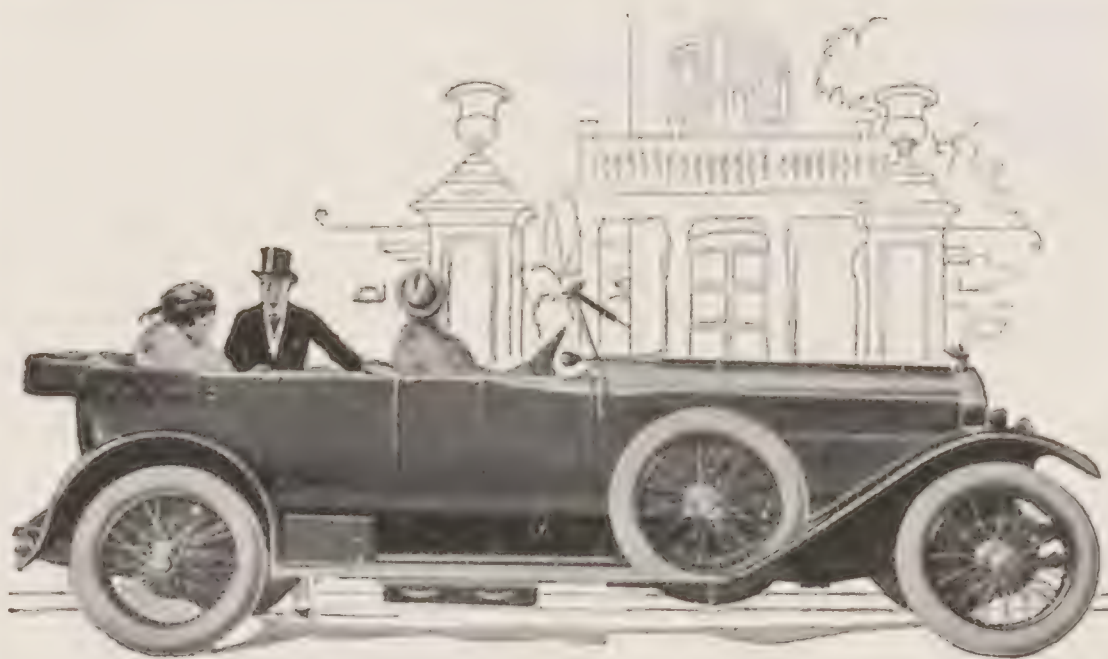
IN a few months the resorts of South Africa will again be drawing visitors thousands of miles across sea. What is the attraction?

Christmas is midsummer there. Then, or earlier, the yearly exodus from Britain starts. All who can escape for a while from the grey North do so. They go South, and when they want to turn the whole year into genial summer, they go to South Africa.

Other resorts are nearer. But distance no longer deters. Indeed there is often concentrated into a Channel crossing more real discomfort than on the whole voyage to Capetown. It is one of the world's smoothest long-distance ocean voyages, and not the least pleasant portion of the tour.

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NOW IS THE ECONOMICAL TIME FOR YOUR TOUR.

TOURING THE NORMANDY COAST.

By Clive Holland.

A Delightful Autumn Touring Ground for Motorists.

WE have often wondered that the beauties of autumn in Normandy have not lured more motorists who can tour at any time of the year to what has aptly been named the Côte d'Emeraude (or Emerald Coast) to distinguish it from the more famous Côte d'Azur of the South of France.

In summer it is well known. One cannot, indeed, then go many miles along its beautiful roads, nor pass through one or other of the fashionable resorts and even less-frequented *plages* without meeting both English cars and English holiday-makers—the latter often in crowds. But these July and August visitors know nothing of the Duchy of William the Norman in September and the first half of October, when the land of apple orchards, pleasant fields, sunlit beaches, and historic towns offers many attractions for lovers of the beautiful and the picturesque.

Living, too, at this season in the seaside towns at which one may well linger, and inland in places frequented during the recognised holiday months of July and August by French, English, and American tourists, is cheaper, and the motorist will find himself a welcome and valued visitor, where in the height of the season he will often meet with scant courtesy, and be charged fabulous prices for board and accommodation.

It is not too much to say that a holiday tour in Normandy in September can be done for two-thirds of the cost, or even less, than the same one in July or August.

Normandy is, fortunately for the enterprising motorist, very easily reached by two good routes—that of Newhaven and Dieppe, and that of Southampton and Le Havre.



The Market, Dieppe, always the scene of picturesque activity.

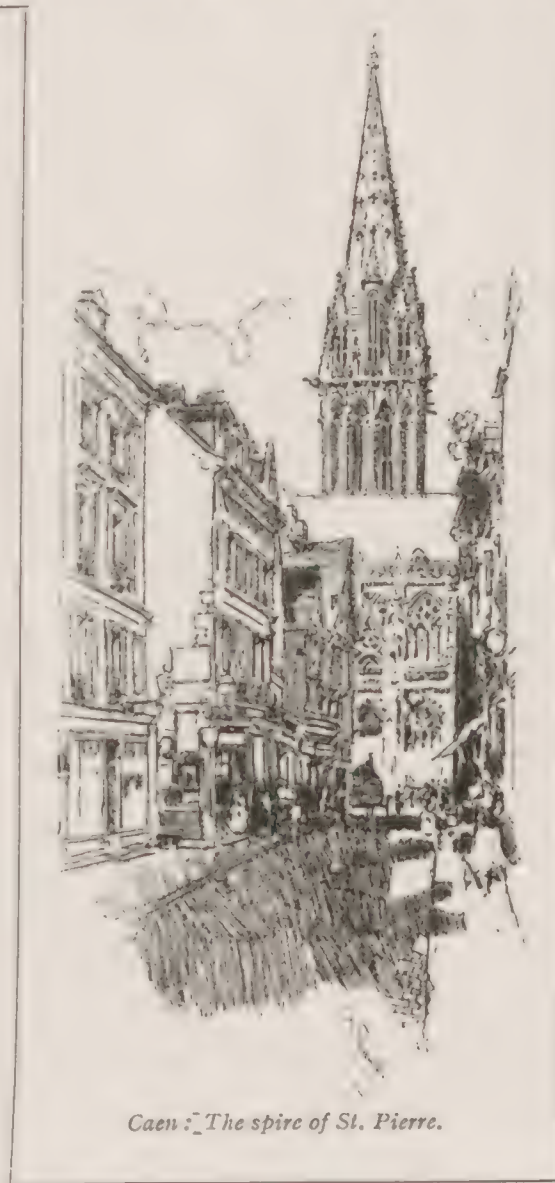
The former route, which is served by the L.B. and S.C. Railway Co., takes one to the eastern confines of the famous Duchy, and the latter, served by the L. and S.W. Railway Co., to a somewhat more central starting-point for one's tour.

We will assume that the shorter Newhaven-Dieppe route is taken. There are excellent arrangements for the trans-shipment of one's car, and the passage occupies only from 3½

to 4 hours.

Dieppe, which is situated in a valley between chalk cliffs at the mouth of the Arques, though a pleasant town with some picturesque buildings, quaint streets and fisherfolk, a good Gothic (twelfth to sixteenth century) church of St. Jacques, with a notable interior and many features of interest, and excellent bathing facilities, need not detain one. There are several popular sea-bathing resorts to the north of Dieppe, and distant but a matter of a couple of miles west is Pourville, a small watering place, situated on the little river Scie. The valley is charming, and an English company are trying to popularise this new resort, which has more possibilities than many that have won success. An excellent hotel has been opened, and facilities for sport, including tennis, golf, trout-fishing, and bathing, and an excellent garage at the hotel, tempt one to make a stay. The Casino has a good band in the season, and motorists might well make a note of this pleasant and rising resort for a centre next season. Near by, in the Scie valley is the Château de Miromesnil, celebrated for its magnificent avenues, and famous as one of the most beautiful and picturesque residences in Normandy.

The road from Pourville has been recently improved. It climbs the hill



Caen: The spire of St. Pierre.

A COUNTRY WHICH CRADLED HISTORY.

and passes the crumbling ruins of the Castle of Hautot, whose owners in the long past fought with William of Normandy at the Battle of Hastings. One goes westward through scattered hamlets, the road being often shadowed by fine trees, to Varengeville (4 ks. 2½ m.) near by which is the Manoir d'Ango, once the palace of a merchant prince in the eighteenth century. There the owner entertained Francis I. It is now a farmhouse, the fine banqueting hall remaining, with a Renaissance chimneypiece, and a wonderful pigeon tower speaking of its past glories.

All along the coast are dotted little towns which are resorted to during the short season of the summer school holidays by French and English folk, just as are the tiny harbours and coves of Cornwall and Devon. Quiberville (16 ks. 10 m.) is one of them. It lies on the hills above the valley. From the solitary wind-swept height near the scattered town, one gets a fine view over the valley and wide stretching meadows, to the tower of Ste. Marguerite standing out clearly against its background of forest trees.

The scenery is extremely pretty as one follows the road to Veules-les-Roses, with its picturesque market and main street, which descends to the sea. The brook, which, after running half a mile or so, suddenly ends in the sea, is a pleasant feature of the thriving little town. Veules has its season, for it is well named "les Roses." There are many villas and a Casino, and the scenery is very pretty. Parisians crowd it in August. The Gothic gate with two round towers flanking it, in the Grande Rue, is one of its historic survivals. The clock tower of the church of St. Martin, dating back from the thirteenth

century, should be noted. The peaceful valley, through which our road runs, had an eventful and troublous past.

The road to St. Valery-en-Caux (30 ks. 19 m.) runs close to the sea. The little town lies in a gap between high cliffs; and the main street starts at the port and runs inland up the valley. The town was occupied by the English during the French Wars of Henry V., and in the succeeding years the little port changed hands many times. The harbour is pleasantly bordered by tree-shaded quays. A bridge leads to the Quai du Havre, on which stands a most interesting house dating from 1540, in which Henri IV. is said to have lodged. The Renaissance

work, and the elaborately carved wooden façade make it a notable survival. On the way to Fécamp one passes the parish Church, in front of which stands a Renaissance Cross. A mile or so from the town stands amid the trees a manor house dating from 1460 surrounded by walls and battlements. It belongs to the family of de Rosny.

The road now goes through Paluel to Veulettes (41 ks. 25 m.); one soon catches a glimpse of the famous hill du Catier, once a Roman camp and locally known as the "tombeau de Gargantua." In olden times there was certainly a great city at the mouth of the Durdent whose picturesque valley goes inland.

The road now runs to the small hamlet of St. Pierre-en-Port, a bathing place with good hotels, villas, and other houses set amid trees. Thence to Fécamp (58 ks. 36 m.). The ancient city lies in a dip between the hills, and of it one gets a good view as one approaches it. The fine and extensive Abbey Church, and other gray church towers, tell their tale of ecclesiastical importance in days gone by. Along the sea-front is situated the inevitable Casino, and from it extend the boulevards. There is a strange mingling of the past and the present in Fécamp, and it is a town worth stopping in for a day or two and exploring. The present Abbey Church dates from the time of Richard Sans-Peur. It was built on the site of an earlier church which his father had founded. It dates from the tenth century. King Ethelred, who was driven from England by the invasion of the Danes, spent a year of exile here. In the great Abbey Church, as a small child, William of Normandy was presented to the assembled bishops and prelates of



St. Jacques is everything to Dieppe. It is remarkable for the battlements on its tower, since the ornamental use of battlements, so constant in England, is found nowhere else in French churches (save a fragment in the once English town of Calais).

WHERE THE SMUGGLERS AND PRIVATEERS LIVED.

the Duchy. William, after his conquest of England, several times returned to Fécamp, and in 1067 and 1075 spent Easter at the Abbey. It was here, too, that his daughter Matilda took the veil. During one of the periods when additions were being made to the building, which became famous throughout Normandy, workmen discovered in the crypt, sealed up in a pillar close to the altar, the relic of the Holy Blood, which is nowadays enshrined in a white marble tabernacle near the Lady Chapel. Yearly two processions are held in its honour, to which pilgrims come from all parts of France.

Fécamp has played a great part in the history of the Duchy, and the Abbey Church is worth more than a casual inspection.

Taking the main road to the sea—leaving the docks to the right—one comes to the distillery of the Benedictine liqueur. It is far famed throughout the world. It has, of course, nothing to do with the monks' distillery so noted in the past, but the great company working it claims to possess the right to use the name of the liqueur, and to possess the secret of the monkish distillers—the discovery of the process of distilling certain herbs into a liquid, which, it is said aptly, "shines like gold and warms like sunlight." The factory is well worth a visit, as the different processes of distilling and the museum attached to it have much of interest in them.

There is a pleasant road up the valley of Gauzeville which leads one into a country rich in Gothic churches, châteaux, prisons, used during the French wars of long ago and during the Napoleonic wars, which are built on islands in the river, and feudal buildings.

Yport, some five miles distant, is a

delightfully situated place, but most motorists will probably prefer to make a cut of it and Le Havre, and go to Yvetot by way of Grainville (70 ks. 44 m.) and Beuzeville (80 ks. 50 m.) to Yvetot (115 ks. 72 m.), whose ancient counts or soi-disant kings were playfully satirised by Béranger.

From thence a pleasant road runs to Caudebec (128 ks. 79 m.). The town was formerly the capital of the Pays de Caux, and it possesses a most beautiful church, in Gothic and Renaissance styles, with an elegant spire nearly 350 ft. in height. The town played a great part in the English and French Wars of the Middle Ages.

It is worth while to run up to Rouen

along the pleasant banks of the Seine before crossing the latter, and proceeding farther along the coast westward.

One regains the coast road again at Honfleur (183 ks. 113 m.), nestling snugly in the picturesque green valley of the Claire. The town is quaint—a queer mixture of the modern endeavour to compete with the frivolities of Trouville a little farther along the coast, and the ancient town of the middle of the sixteenth century which still has many survivals.

Honfleur is a bustling and interesting port from which start the steamers plying across the bay to Le Havre, and across-Channel to Southampton.

The gardens, docks and boulevards shut in, as it were, the old town, where stands the sole relic of the ancient château, with its loopholed turrets, watch towers, and ancient windows. And at the back of the old harbour lies many a lofty oaken-gabled house, roofed with slate slabs mellowed by age. There is, too, a quaint tangle of narrow winding streets and lanes hereabouts, with small wooden houses—some of them sinister-looking enough to have been the lairs of the smugglers and privateers of old for which the town was famed.

The old 16th century house in the rue de Prison, fitted up as a museum of the period, should be visited.

The main road to Trouville (198 ks. 124 m.) through Vasoury is a good one; it runs by the sea, or one can take the other road through the pleasant forest of Touques. One passes through pleasant rural scenery, the landscape dotted with picturesque thatched farmhouses and set amid fertile fields. But some little distance before Trouville is reached one becomes aware of the proximity of this most fashionable and festive of watering-places.



Honfleur is a town of character. Although nothing remains of the fortifications which went through the troubles of the Hundred Years War, there is, near a row of curious old houses of great interest on the Quay, a single fortress of the sixteenth century.

Amid apple orchards one sees beautiful villas, surrounded by extensive and often lovely gardens, almost mingling with the old farmhouses environed by hedges of yoke-elms, woodbine and wild roses. Trouville will have ended its brief, gay season before these lines appear, or it will at least have waned, and the Parisian butterflies of fashion and frivolity will have returned to "*la ville lumière*." One need not, therefore, pause long at Trouville, which somehow in its general plan reminds one not a little of Algiers, with the fishing town—the original seaport and seamen's hamlet—down along the shore, and the fashionable villas mostly perched on the heights above it. There is a wonderful contrast in the simple Chapel of St. Jean, near the harbour bridge, and the great and fashionable Church of Notre Dame-des-Victoires which stands on the hill. In the Rue des Rosiers stands the house in which Louis Philippe hid after the Revolution of 1848.

To reach Deauville (200 ks. 124 m.) one crosses the bridge by the docks. Formerly, this now much boomed watering-place, where notabilities and the reverse disport themselves during the short summer season, was a select and even stately place of imposing villas. It has been largely spoiled by modern developments.

It is well worth while to leave the coast road and make a diversion up the beautiful valley of the Touques through charming scenery to ancient Lisieux (240 ks. 150 m.), with its Cathedral of St. Pierre, dating in parts from 12th and 13th centuries, its many ancient houses and old-world air. The church has a striking portal, with the most quaint and interesting doors in all Normandy. The Court House is the old Episcopal Palace when Lisieux was the seat of a Bishopric. Hotel accommodation is good and prices moderate.

There is a good road to Mézidon (265 ks. 164 m.) from whence the coast can be regained at the little port of Dives (295 ks. 183 m.), from whence William of Normandy sailed for the conquest of England, and where there



Rouen, the quays of which are the haunts of artists.

is a charming inn bearing his name. From Dives the shore road will take one to Ouistreham (310 ks. 192 m.) an old seaport at the mouth of the canal leading to Caen, with a 12th cent. Romanesque church.

The coast road may well be left now for a space to permit of visiting Caen (330 ks. 205 m.) the town of the

Conqueror, full of historic interest, fine churches and old buildings.

Bayeux (365 ks. 220 m.) is also worth a day's pause, if only to see the famous tapestry (probably wrongly) ascribed to Matilda, the wife of the Conqueror, but of the period. One may now either regain the coast and proceed to Isigny (400 ks. 249 m.), or go to Carentan (410 ks. 255 m.) through flat grazing land extending from the valley of the Vire.

Two alternatives now present themselves. The first to turn south and, following the course of the Vire, reach picturesque St. Lo (435 ks. 269 m.). The second to proceed up the Cherbourg peninsula to Valognes (475 ks. 296 m.) through pretty scenery, and the Cotentin country, the villages of which have given their names to many of the noble families of England of the past.

Then the route may well be down the west side of the peninsula to Coutances (535 ks. 333 m.); Avranches (580 ks. 361 m.); both interesting and charmingly situated towns.

The route back to Le Havre giving most variety of scenery and of the greatest interest is Avranches-Alençon Chartres-Evreux-Elbeuf-Le Havre.

One passes through some beautiful scenery, and in Chartres and Evreux there is much of architectural and historical interest.

The roads are almost invariably good, if not quite so excellent as in pre-war times. Such a tour as has been sketched out will leave on the motorists' minds the impression of great loveliness, of sunlit coasts, and fertile valleys, of historic and ancient towns, and quaint and pleasant villages scattered amid scenery that is almost always beautiful, and scarcely ever uninteresting.

Normandy in autumn, we believe, will be a quite new experience, and even a revelation, to those who only know it in spring or summer. Try it, is our advice.

Our illustrations are from original drawings of Joseph Pennell by the courtesy of Messrs. Macmillan & Co., the owners of the copyright.



To the mere stranger beauty does not appear the salient character of Le Havre. He remembers it as a busy, dingy port such as Liverpool or a dozen other places, but the antiquity of old Havre is particularly interesting.

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is apt to vary to a large extent.*

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I have a Belsize Car, and about 18 months ago, owing to the excessive amount of lubricant I was using in my gear box, I decided to try your AMBROLEUM, with the result that my cost per mile for lubricant for my gear-box has been reduced to 10% of what it was before I used Ambroleum.

Needless to say, therefore, I use nothing else but Ambroleum now, and shall continue to do so. I have also recommended several of my friends to use it; they have had a precisely similar experience to me. I enclose UNIVERSOLINE coupon. If this product is as good as Ambroleum it will fill a long-felt want.

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14 h.p. Standard Model. Four Seater.

Lucas electric starting and lighting set, with electric horn, clock and speedometer, hood cover and side curtains, spare wheel and tyre, with luggage carrier and kit of tools. Finished in elephant grey with real leather upholstery. Dunlop Magnum tyres.

£395

14 h.p. De Luxe Model. Four Seater.

With complete specification as in Standard Model but with detail chassis improvements and De Luxe body, including double windscreen and all-weather side curtains, opening with all doors. Dunlop Clipper Cord tyres. Offered in choice of following colours :

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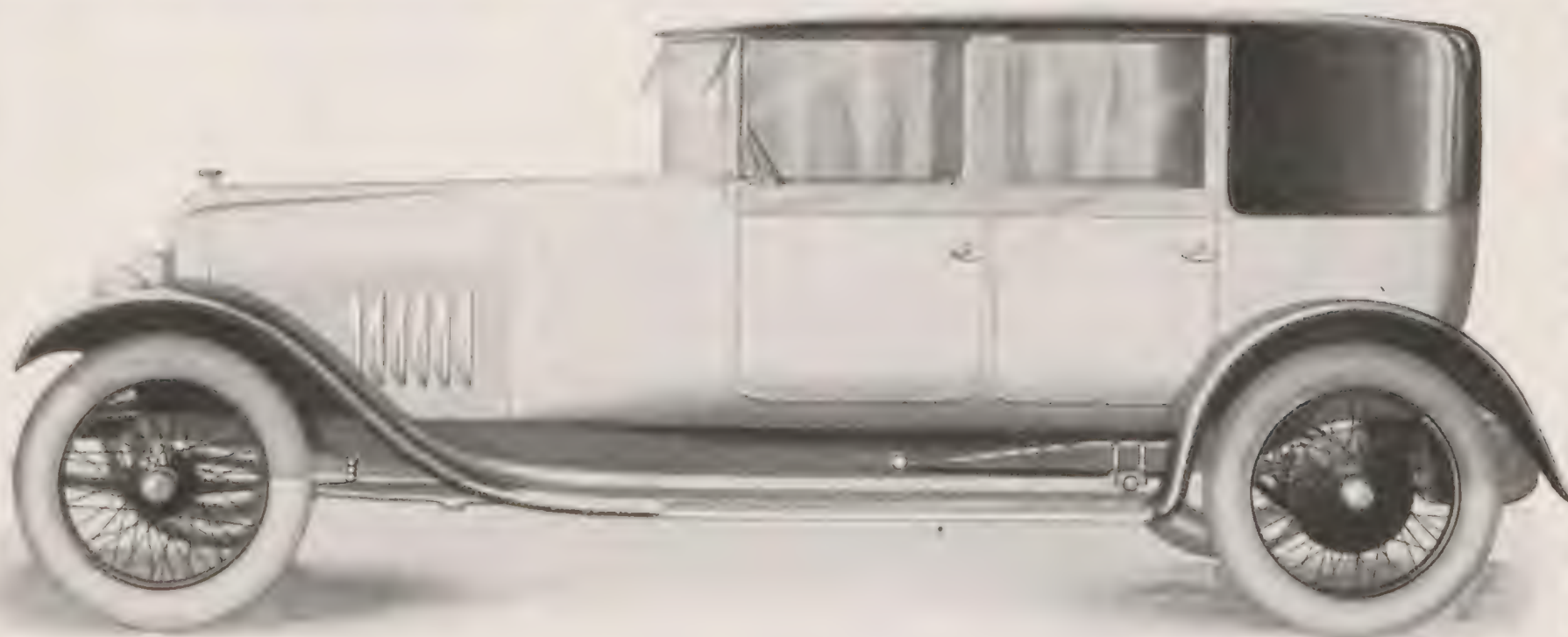
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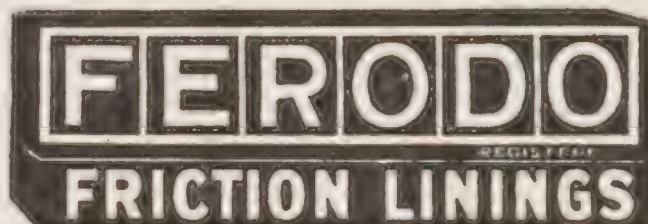
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DO YOU WANT A NICE ESTATE, SIR?

Most of us are fond of picturing mentally the type of estate we should like—when our ship comes home! Some particularly interesting propositions are on the market at the present time—and at quite reasonable figures.

WHILE Prince Antoine Bibesco is visiting his estates in Roumania, the Princess has been staying with Mr. and Mrs. Asquith at Sutton Courtenay. It is a little uncertain whether His Highness will continue to represent his country at Washington; but, in any case, he has decided to part with his London residence, 13, Hyde Park Gardens. It is one of the finest of those facing Hyde Park and was, in the late 'fifties, the house of the eccentric fifth Duke of Portland, who built the underground reception rooms at Welbeck. Prince Bibesco entirely modernised the house when it came into his possession some three years ago, with the result that it is as complete as any private house can be. Central heating, passenger lift, exquisite decorations and fine garage all combine to form a choice property, in addition to which it enjoys a due south aspect over private ornamental gardens and the glorious expanse of Hyde Park beyond. Prince Bibesco has instructed Hampton and Sons to offer it by auction at their Sale Rooms in St. James's Square this month, but we believe the right has been reserved to sell it privately before the auction, if a buyer comes along.

At the sale at Chichester, on the 27th ult, by Messrs. Hampton and Sons, acting in conjunction with Messrs. Stride and Son, of Chichester, of the Bosham Estate, there was a very large attendance at the Dolphin Hotel. The estate, which comprises some of the richest corn land in England, was offered in 8 lots, the total area being about 1,442 acres; about 455 acres were sold for a total of £16,000. "Southwood Farm," of about 365 acres, fetched £11,000, being sold with possession on completion; and "Miles Farm," of 62 acres, was sold for £3,150, with 29 acres of accommodation land, for £1,500. The Old School House on the Bosham Channel, with two acres, fetched £450, while "Old Park House," with its grounds and park lands of about 25

acres, was bought in at £4,650. The valuable agricultural and sporting estate of 778 acres, including "Old Park Farm" of 440 acres, offered with possession, was withdrawn, as was also "Leverhome Farm," of 191 acres.

A very beautiful residence on the hills between Guildford and Dorking, commanding magnificent views, and which cost the late owner about £45,000, built under designs by Sir Aston Webb and erected under his superintendence, is among the three properties referred to in this issue for sale by Messrs. Alex. H. Turner and Co., of 69, South Audley Street, W. The trustees are now prepared to accept an extremely moderate price. The second property comprises a unique shooting and fishing estate in a very beautiful part of Breconshire, including one mile of first-class salmon fishing in the Wye, and also two miles of salmon and trout fishing in the Irton. The whole property is in perfect order and the gardens and grounds are a special delight, and the shooting is exceptionally well placed. The third property is a charming old half-timbered seventeenth century gentleman's farmhouse on the hills above Henley, called "Cross House," Kidmore, with 36 acres, or less. It will be offered to auction in lots very shortly if not sold privately in the meantime.

The Priory, Lewisham, an exceptionally picturesque, commodious, and interesting property, to which tradition ascribes a monastic history, has just been sold by Messrs. Norfolk and Prior. The site extends to nearly two acres, with valuable frontage, owing to the growth of the district, to the property. With three reception rooms, 10 bed and dressing rooms, garage, and old world gardens, "The Malt House," in the picturesque hamlet of Broad Campden, has also been disposed of, in conjunction with Messrs. Young and Gilling, by the same agents. The residence, which stands in a quiet by-lane and separated from the road by a wide grassy bank crossed by a paved

path and steps, is built of stone with a roof chiefly of old lichen-covered stone tiles. Part of the residence is of considerable antiquity, and part of more modern construction, the whole, however, displaying the salient features of the typical Cotswold houses, whilst at the same time it has been modernised to meet the requirements of to-day. The state of repair throughout is excellent.

A very desirable residential property in Surrey, together with about 9½ acres, situated on a slope of the Reigate hills, the house containing halls, four reception rooms, ten bedrooms, and all modern conveniences, is advertised in this month's issue by Messrs. Harrods. There are delightful grounds with tennis and croquet lawns, ornamental lake and productive kitchen garden, with glasshouse, etc. It is a property that can be strongly recommended, and the price quoted is open to any reasonable offer. Other properties advertised comprise a modern house in a favourite suburb of Kent, within easy reach of town, and having about 2¼ acres of well-matured gardens and grounds, and a property near Amersham, the chief feature of which is the delightful old-world garden upon which an enormous amount of time and money has been spent to bring it to its present attractive state.

Château Devachan, San Remo, at which the first Peace Conference was held in April, 1920, is to be offered for auction by Messrs. Knight, Frank and Rutley, in November, at Hanover Square.

A tablet with the signatures of Mr. Lloyd George, Signor Nitti, Monsieur Millerand, Maréchal Foch, the late Sir Henry Wilson, Admiral Beatty, Earl Curzon of Kedleston, and others, is in the salon, and will be included with the property.

The château, which was built by the late Earl of Mexburgh in 1910-13, occupies a beautiful position on the southern slope, and is about 15 miles from the French Riviera.

SOME OF MY MANY THRILLS.

Sir Arthur Whitten Brown, K.B.E., chats of early Motoring Experiences, War Flying, German Prison Camps, Transatlantic Flight, and the Future of Civil Aviation and Passenger Services, with Mr. Chuc Holland.

SIR ARTHUR WHITTEN BROWN, K.B.E., is not "a big, silent man"; but he is a big man in accomplishment and experience, and certainly a somewhat silent one. We can easily imagine that most people would find it difficult to get him to talk, especially of himself and his adventures. But we were fortunate enough to meet him under very favourable conditions for a chat, and he told us some fascinating and highly interesting things. He is of medium height, dark, and clean shaven. He looks less like the typical airman—except, perhaps, for a pair of keen and rather restless eyes, which seem to be always on the lookout for conversational "air pockets" and the possibility of forced landings—than he does a barrister.

"My father is an engineer, and from my earliest days I had determined to follow in his footsteps."

"I have," he said, "been almost brought up on motors. When about fourteen years of age I managed to "pinch" a car, and drive off with it. It was a single-cylinder, belt-driven Benz, two speed, with a seat for two in front and one for two behind. I had several narrow shaves of a smash up, although I was a more cautious driver than I have since developed into. I remember the feeling of elation when I realised that I was on my own. And I can imagine the feelings—anything save elation, I fancy—of the owner of the car! However, all ended well, and I puffed home safely. In those days cars were only thought to be for the initiated, and I was sup-

posed to know nothing about them. Hence the excitement that my act of land piracy created. Those early cars took some driving," and the speaker smiled. "No hundred miles an hour, nor even fifty, when going at top speed. You remember that all motor-cars in the very early days had to be preceded by a man with a flag. Well, I don't believe that there was much risk in some of the earlier types of running over the man!

I was in South Africa on the Rand in 1909, and saw some of the

early motor racing out there. I was timekeeper in the 100 miles race in 1910 from Johannesburg to Pretoria. The race was run in connection with one of the pioneer organisations out there, the Transvaal Automobile Club. Mr. F. Davis was the owner of the winning car, which averaged the then enormous speed of 30 miles per hour. The car was a 12-14 Clement Talbot, and it had a very narrow escape at the finish. The road was only, of course, fairly good. Just outside Orange Grove, Johannesburg, a private car turned across the road, and to avoid it the racing car had to mount the bank at top speed. Fortunately top speed then was not what it is nowadays.

"There was, as now, a good deal of money in the Rand, and quite early in the days of the motoring industry cars of the latest pattern were shipped out there for the managers and officials connected with the mines. But for quite a long period the roads were 'rough' on cars, with the exception of the magnificent 'Reef Road'; and even nowadays I should imagine one could always get some excitement when motoring off the main and high roads."

We then spoke of the developments which had taken place in motors prior to the war. Sir Arthur Whitten Brown pointed out how really rapid had been the progress from about 1910 to 1912 compared with previous years; and, of course, what enormous strides were made in the construction of engines during the early period of the war.

"Reliability," he remarked, "received an



Sir Arthur Whitten Brown K.B.E.

AS SEEN FROM THE SKY, WITH THE CAMERA'S EYE.



The flight from London to Paris is full of interest from the scenic point of view. First the carpet-like expanse of Surrey and Kent; then the Channel, like a broad strip of jade or hammered silver as the weather makes it; then the French coast, fields of mathematical regularity, narrow streams from the great height like mere trickles of water, tiny villages seeming like those on a relief map, and at last picturesque Beauvais (left-hand picture) on the approach to Paris.



Le Touquet, with its two lighthouses, seen from the air presents a picture of the varied greens of forest trees in Spring, Summer and Winter, with its famous hotels—in wartime Hospitals—set amid the foliage, with the many villas dotted here and there, like eyes in the head of a green dragon. Paris-Plage (right hand foreground), that fashionable summer resort of Parisians and English alike, skirts the sea, its wide stretch of sand forming a belt of white along the green coast-line.

As one leaves London for the Continent by air one gets a wonderful panorama of the outskirts of the Metropolis, and sometimes of the silvery-looking Thames. The bird's-eye view of the vast East India Docks is of great interest.



Sir Arthur took part in the historic 100 miles motor race in 1910 from Johannesburg to Pretoria. The left picture shows one of the competing cars being "tuned up." The speed attained was not great, some 30 miles per hour, but then the roads were not those of to-day. The right-hand picture shows the arrival of one of the cars at one of the controls. Motor racing in those early days was not the thrilling sport as seen to-day at Brooklands.



immense amount of attention, and the result is the almost perfect working engines of to-day. I consider the war taught us a tremendous lot regarding automobile engineering and metallurgy; as well, of course, as regards all departments of aviation."

This naturally took the conversation to the subject of "motoring in the air."

Sir Arthur Whitten Brown was early in the Royal Flying Corps, and was soon flying in France. In the early days of the war neither observation nor piloting had been brought to the high state of perfection that it afterwards attained.

Sir Arthur Whitten Brown, however, was not destined to have a long career in the R.F.C. Early in 1915 he, with Harold Medlicott, went up on reconnaissance work over the German lines.

"We started in a snowstorm and were escorted by two other planes," he said, "for we knew, or at least anticipated, we were likely to get in for a hot time. We had been flying some time in the direction of Lens, when we rather suddenly lost the escort. We did not know what had happened, whether engine trouble, or even if the planes had been hit. We flew on without it. Both Medlicott and I were keen on the job, and a short time after losing our escorting planes we got across the German lines near Lens. We also ran into clearer weather. This was good for observation purposes, of course; but we ourselves were soon 'spotted.' Fortunately the weather kept the enemy planes on the ground, but unfortunately could not keep archies quiet. By the time we reached Vitry—where our chief observations were to be made—we got it hot and were heavily and continuously shelled. We completed our observations, and had turned to make our way back at top speed, when a shell burst near us, and soon we discovered our main petrol tank had been pierced by a shrapnel bullet. Soon we were in difficulties, and Medlicott signalled we should have to make a forced landing. I had been hit; but, fortunately, he had escaped the shower of bullets which had broken round us like a hailstorm. We made a bad landing, and I was thrown out on one of the crumpled wings. Medlicott was hanging in a helpless position, head downwards from his safety belt, which was fitted with a pin, and had no knife by means of which one could cut oneself adrift. The

Huns were soon buzzing round us. We perforce surrendered, and I next woke up to the fact that I was at a field dressing station.

"I was taken to a hospital at Aix la Chapelle. Then we had a period in a prison camp. On the whole we were well treated, but, of course, tried to get away. Medlicott made thirteen attempts altogether and at the last was deliberately shot. He was a fine fellow.

"I was afterwards exchanged to Switzerland, and ultimately to England with the first batch in September, 1917. We were well treated in Switzerland, had plenty of amusement, including winter sports, and, if one had not wanted to be back and in things again, one would have had a very jolly time.

In regard to his wonderful flight across the Atlantic Sir Arthur would say very little. "It is an old story," he remarked, "and, thrilling as the experience was, one need not re-tell it at length. Hawker was unlucky in many ways. His was a fine performance though failing of success. We had bad weather all through; but some streaks of luck. But the fact remains that we—that is, the late Sir John Alcock and I—flew some 2,000 miles across the Atlantic in just under 16 hours—to be exact, three minutes short of that. Our Vickers-Vimy plane, with its two 375 horse-power Rolls-Royce engines, served us well.

"The loneliness of such a flight, and the anxiety of it, one would be ridiculous to minimise. The constant strain of navigation and observation was very heavy. The pilot underwent just the same sort of mental and physical strain, and few could have succeeded as he did.

"I suppose we felt very much as Columbus did when he sighted America when we 'picked up' the Old Country. I admit that there was a thrill in doing that, and of knowing the system of navigation which I had worked out had pulled us through all right."

In reply to a question as to what it felt like to land after such a flight Sir Arthur remarked, "Rather queer. I felt like bed, or at all events, sleep for a month."

In regard to aerial navigation Sir Arthur Whitten Brown said, "Wireless has greatly simplified navigation in the air. One can be in communication with the earth practically all the time. Without wireless and opportunities of land observation the only system would be astronomy.

Regarding aerial navigation of the future, and air travel, the speaker had very definite ideas.

"Any distance will be possible when air travel has been properly organised, and landing places, petrol depots, and other conveniences are available at all points. Engines, too, will tend to become more reliable as time goes on, and although one cannot altogether eliminate risk in aerial navigation I look forward to seeing unavoidable risks reduced to the minimum.

"I agree with you," continued the speaker, "that an accident to an air service machine bulks more largely in the imagination than an accident to a railway train, unless the latter is an exceptionally bad smash. The amount of attention an air crash attracts is, I think, somewhat unfairly out of proportion. One is apt to forget the number of successful trips to Paris, Brussels, and elsewhere made safely.

"We are a long way off universal air travel. For one thing in the United Kingdom it will probably never be used to any large extent save for pleasure. It is on long distances that it becomes a business proposition, and a great time saver. The United Kingdom is so small, comparatively speaking, and has such excellent railway systems and transport that it is not worth while except in very unusual circumstances.

"What is now wanted to popularise air travel is to bring the cost within reach of the majority, instead of keeping it so high that only the minority can afford it. I do not, however, see how the last is to be managed for some long while to come, as air traffic to-day is actually carried on at a loss. The greatest travel fliers are probably the Americans, who come over here and take great advantage of our subsidised service to go to Paris by air."

"What is chiefly needed," said Sir Arthur Whitten Brown, as we stood talking before parting, 'is money. It is scarce just now in aviation circles, and until there is more for experimental work we are not likely to make rapid progress in air travel developments. I still think there is a great future for air travel; but it is in its infancy at the present time."

The future will show how far Sir Arthur's prophecies will be justified. Now that in most industries valuable reductions in costs are becoming practicable, is it not reasonable to hope that the same will, in due course, apply to aviation?

THE BIRTH OF THE CAR.

Just at this period of the year, when the great "Motor Show" is "in active preparation," it is quite instructive—and amusing—to look back over the period intervening since the inception of the automobile movement.

LOOKING at our city streets thronged with magnificent private automobiles and commercial motors of all descriptions—from the chemist's carrier to the brewer's dray and the pantechicon van—then visualising our country highways, along which proceed a continuous procession of private cars, traders' lorries, and public conveyances, it is difficult to realise that only 25 years ago, before a self-propelled vehicle could move along any of our roads it had to be preceded by a man carrying a red flag.

Among other restrictions the speed of any "locomotive" was then limited to two miles per hour in towns and villages, and four miles in the open country. At least three persons had to be in control of it—one walking in front, one behind, and one steering. It had to stop at once at the command of any person with a horse, or carriage drawn by a horse, and on no account had its whistle to be sounded.

The year of emancipation for the motor-car was 1896, for in that year Parliament passed the "Locomotives on Highways Act," which allowed self-propelled vehicles of not more than three tons weight to proceed at a rate not exceeding fourteen miles per hour. This rate was reduced by the Local Government Board (under powers given it by the Act) to twelve miles per hour; and it was not until 1903, when the Motor Car Act was passed, that this speed was increased to twenty miles per hour. It was in 1865 that the "red flag" Act was put on the Statute Book. Up to then the automobile movement—commencing with the early days of the century, when steam cars were being experimented with—was well to the fore in England. The first public service of mechanically propelled vehicles was run between Gloucester and Cheltenham in 1831; the motive-power was steam. In 1836

"THOUGH I EBB IN WORTH,
I'LL FLOW IN THANKS."

FROM far-off Johannesburg, in the pleasant pages of "The South African Motorist," we cull the appended little compliment to the "Motor Owner." Coming, as it does, from so far away, and from such an authoritative source, it is rendered doubly pleasing. The comment appeared in the September issue of that journal, and reads as follows: "The 'Motor Owner,' for a three-year-old paper, has achieved great things. It deals with many matters of interest to a motor owner, but whatever subject it treats of, it adorns. To capture the public taste with the printed word and even illustrations is not an easy matter, yet the 'Motor Owner' has handsomely succeeded. We of the 'South African Motorist' look forward each month to the 'Motor Owner's' arrival. Care seems to be taken with every line written, an ideal no doubt, but a right worthy one, and readers are quick to appreciate it, when it is—as with the 'Motor Owner'—so consistently pursued. Not only is the reading matter of interest (readers the world over want this quality), but also the illustrations are attractive. Attention to detail in the presentation of the illustrations is a marked feature. We are glad to note that the Transvaal Automobile Club at Killarney, Johannesburg, take the 'Motor Owner' regularly for their readers at the club's reading table—which is well patronised, by the way."

a service was started between Stratford, Islington and Paddington.

The year 1840 saw the first steam automobile fitted with differential action for the wheels. In 1865 a Frenchman, M. Lenoir, invented a gas-motor for propelling vehicles; this was the forerunner of the internal combustion engine, but it was the German, Herr Gottlieb Daimler who produced (in 1885) the first practical motor of this type for locomotive purposes. Hard on his heels followed the Dion-Bouton, Peugeot, Panhard, and Lavassor inventions.

The first road race—between Paris and Rouen, a distance of 80 miles—took place in 1894. Two Peugeot cars with Daimler engines tied for first place. In 1895 we saw the first Paris-

Bordeaux race over a 744 miles course. The averagespeed attained by the winner was 15 miles per hour! In that year also was held the first Motor Show in England, at Tunbridge Wells, as an extra attraction to an Agricultural Show. The number of cars mustered was four. The number of private cars at the 1922 show was over 600, including 60 entirely new types.

The emancipation of the motor-car by the passing of the "Locomotives on Highways Act" was celebrated by a run from London to Brighton, which created remarkable interest at the time—also a little ridicule. Twenty cars took part; several arrived at their destination the same day, others the next, a few not at all.

The first Gordon-Bennett race (Paris-Lyons) was held in 1910. The speed of the winning car was 38½ miles per hour. The speed attained in the same race in 1920 was 72 miles per hour.

It is estimated that to-day there are in England some 250,000 private motor cars, and 870,000 commercial vehicles. America has nearly 9,000,000 cars, or one for every eleven of the population.

Such figures give some idea of the vigorous growth of an industry the future development of which cannot even yet be gauged. Unfortunately, we in this country have not developed to anything like the automobile extent one would like to see. But it is probable that we shall fulfil our old ideas of slow and sure, and the recent valuable reductions in the price of petrol and tyres will act as a stimulant. And now we are already looking forward to another milestone—the great show which opens next month at the White City and Olympia. It will display all that is latest and best and most economical in current motor development—a striking contrast to the good old days which witnessed but recently "The Birth of the Car."

BRITISH SPEED CHAMPIONSHIPS.

Crowds of spectators gathered at Brooklands to witness the Speed Championship Races, and it is gratifying to record that this experiment proved highly successful.

BEING the first race of its kind to be held in this country, the Speed Championships of Great Britain attracted a huge gathering at Brooklands on Saturday, September 30th last.

The meeting, instituted by the Essex Motor Club, was undoubtedly a great success, although many spectators were a little disappointed regarding speed and thrills. Many were expecting extremely exciting times, while some even had fears of disaster, but apart from a burst tyre on the Isotta-Fraschini, a cracked cylinder on Mr. Woolf Barnato's Talbot, and two or three very close finishes, the meeting was without incident.

There were seven championship races and half-a-dozen handicaps, during which some very fast laps were made. The record of the day was 116.64 m.p.h., recorded by K. Lee Guinness on the 12 cyl. Sunbeam; and with a speed of 104.04 m.p.h., the same driver won the Unlimited Championship race, for which achievement he earned—and well merited — THE MOTOR-OWNER Cup, offered for this event.

In the championship race for cars of 5,000 c.c., there was an extremely close fight. The race between H. O. D. Segrave and Count Zborowski held every spectator's eyes, for between the cars there was not a length's difference for most of the way. If one shot forward, the other shot after it. It was a real cat and dog race, but the finish resulted in a length's win for Segrave.

Usually the Count has a wonderful knack of passing his man on the Byfleet banking. If, when he disappears behind the aeroplane sheds, he is in rear of his opponent, by

the time he reappears the position is generally changed, due, no doubt, to his enormous gathering of speed along the railway straight. But he was unable to perform the trick on Segrave. That the race was a hard fight was emphasised by the appearance of the Count and his passenger on returning to the paddock. Both their faces were smoked black, and as an explanation the Count's passenger said, "We were so close to Segrave that we were nearly stifled by the Sunbeam's exhaust"—and "exhausted" they certainly looked.

The winner of the second MOTOR-OWNER Cup, offered for the 3,000 c.c. class, was Mr. M. C. Park, driving the Vauxhall, which attained a speed of 97.08 m.p.h.

Another exciting race was that of the Essex Lightning Long Handicap, in which the Count, on the Ballot, M. C. Park (Vauxhall), W. B. Horn (Straker Squire), and E. A. Eldridge (Isotta-Fraschini), were competitors. The event seemed to be a fight mainly between Zborowski and Eldridge, who

were wonderfully even throughout. Just prior to the finish, however, the Isotta burst a tyre, which was literally torn into a hundred shreds, and this piece of Fate allowed the Count to run home an easy first. Owing to his mishap the day before, when the enormous Chitty-chitty came to grief, Count Zborowski was the centre of attraction throughout the day.

The only lady driver, Miss Ivy Cummings, gave a fine display of driving, and although she was unable to make a win, she was successful in recording 2nd and 3rd in the Essex Senior Short Handicap and the Essex Junior Long Handicap respectively.

The following are the championship winners in their respective classes, together with their speeds: 1,100 c.c., A. Fraser Nash (G. N.), 78.76 m.p.h.; 1,500 c.c., A. J. Joyce (A. C.), 92.28 m.p.h.; 2,000 c.c., K. Lee Guinness (Sunbeam), 92.38 m.p.h.; 3,000 c.c., M. C. Park (Vauxhall), 97.8 m.p.h.; 4,000 c.c., W. B. Horn (Straker-Squire), 87.08 m.p.h.; 5,000 c.c., H. O. D. Segrave (Sunbeam), 105 m.p.h.; and, Unlimited Class, K. Lee Guinness (Sunbeam).

There were some very fine speeds also in the Handicap Events which followed immediately after the Championship Races, for at a speed of 78.08 m.p.h., the little 2-cylinder A.V., driven by Major R. C. Empson, won the Essex Junior Short Handicap; while in the Senior Short Handicap, J. P. Thomas, on the 8-cylinder Leyland, recorded a winning speed of 103 m.p.h. Mr. Thomas's performance on the Leyland was one of the features of the meeting, and the manner in which the car "got away" from the start was really praiseworthy.



H. O. D. Segrave (Sunbeam), Speed Champion of the 5,000 c.c. class.

WINNERS OF THE "MOTOR-OWNER" CUPS.



Above: Kenelm Lee Guinness, at the wheel of the 12 cyl. Sunbeam, on which he made the record speed of the day at 116.64 m.p.h. With the same car, at a speed of 104.04 m.p.h., he won the Unlimited Championship Race, for which achievement he was awarded the MOTOR-OWNER Cup, offered for this event. On the right (above) is the winner of the second MOTOR-OWNER Cup, offered for the 3,000 c.c. Car Championship. In this race there was a keen contest between H. O. D. Segrave (8 cyl. Sunbeam), M. C. Park (Vauxhall), and Capt. J. F. Duff (Bentley). The winner was Mr.



M. C. Park, who gained a meritorious success at a speed of 97.8 m.p.h.

Contrary to the expectations of many of the spectators, Count Zborowski, with more than his usual eagerness, was among the competitors. Many imagined his terrible accident the day before meant that he would probably not appear, but as the centre picture illustrates, he was "very much there," and very much sought after, and his performances throughout the meeting were particularly good, one of them being in the last race of the day, when he recorded a speed of 113.45 m.p.h.

The Essex Motor Club is to be congratulated upon the success of the meeting, the first of its

kind to be organised, and we hope that next year's event will prove an even greater success.



L 1557.—Lady's Morocco Leather Expanding Motor Case, Lined Silk, with Plain Sterling Silver and Ivory Fittings.
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THE CHANNEL TUNNEL.

By Leonard Henslowe.

France is wondering why the British Government hangs up the Channel Tunnel construction.

IT is sixty years since the project was launched, and thirty since it was commenced on both sides of the Channel, and yet we are little farther.

I want here to warn road interests that the railways will endeavour to see to it that trains only will pass through the Channel Tunnel.

This would be a great injustice to mechanical road transport, which, year by year, becomes ever-greater and more important.

The roads to-day are assuming an importance equal to that they had in 1830, therefore this big national project should provide for roads under the Channel as well as rails.

FOUR TUBES NECESSARY.

At present the plans provide for two rail tubes between points near Dover and Calais, but when road interests are properly represented, two more tubes, for north and south road traffic, should be insisted upon. In this way uninterrupted motor travelling can be carried on between England and the Continent, to the immense saving of time and convenience, as all motorists travelling to the Continent by present methods will agree.

Not far distant the world's highways will be laden with motor traffic, and for this great international undertaking to be "railway only" would be a huge mistake, and one that will only be avoided if road interests are properly represented amongst the powers in authority.

BY ROAD TO EVERYWHERE.

Provided road tunnels are built, the through transport of goods by road from every part of the Kingdom to every part of the Continent will be possible, and, at the same time, motorists will be able to motor from any point in England to any point on the Continent and parts of Asia with scarcely the need to leave their cars.

As to the method to be followed for petrol vehicles; they will not

be able to travel through the tunnels under their own power. Carbon monoxide is very poisonous, and one car passing through a 25-mile tunnel under the sea would be obnoxious, but a procession of them would probably kill every human being concerned long before the first car got to the other side.

ELECTRIC TRACTORS.

The difficulty, however, can be perfectly well overcome by building a fleet of two-wheeled electric motors to be attached by couplings to the front of every car or other motor vehicle travelling through. The service of these could be included in the charges made for using the tunnels.

Electric traction for this length would probably be cheaper than petrol in any case.

When the English Channel Tunnel is an established success, tunnels at other points, such as Gibraltar, will be built, and "Cape to Cairo" will become "Cape to London."

OZONE THROUGHOUT.

Ventilation is the least of the problems to be met in the tunnel construction. Under London there are over fifty miles of tube and other

tunnels adequately ventilated by immense electric fans and Ozonair.

The road surface of the tunnels would be of very different construction from ordinary roads. Asphalt would be used, and as horses would never be driven on them and they would never get wet, the two chief objections to asphalt are removed. Thus dust will be almost non-existent.

INVISIBLE LIGHTS.

The lighting should be arranged with all lights shielded from view in the direction of travel, thus the glare from light would be avoided.

There should be occasional bays for side-tracking a broken-down car, and the width of the tunnels should permit two cars or lorries to travel abreast, though this procedure would not be allowed.

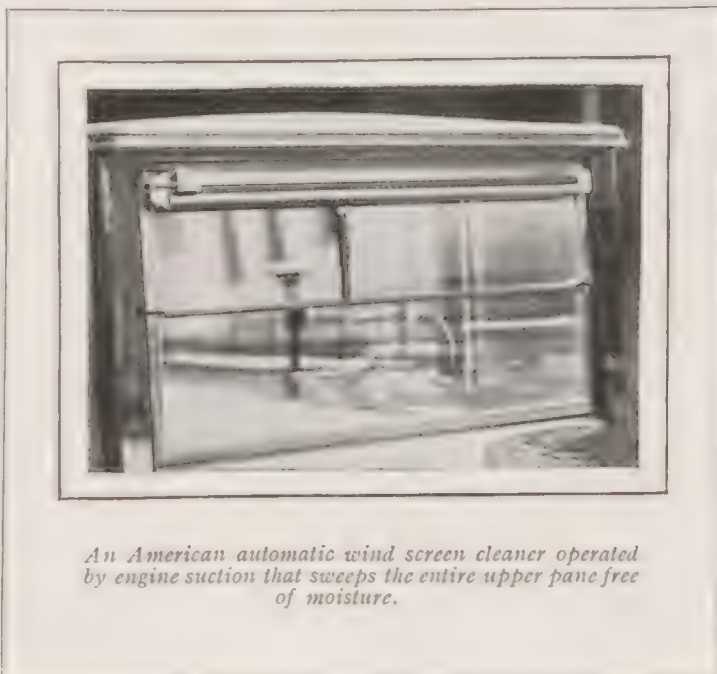
All electric motors should be of the pusher and tractor type and powerful enough to draw more than one car, if necessary. Thus, in the contingency of a breakdown to a car or tractor they could be drawn or pushed to the nearest bay.

PARIS IN TEN HOURS.

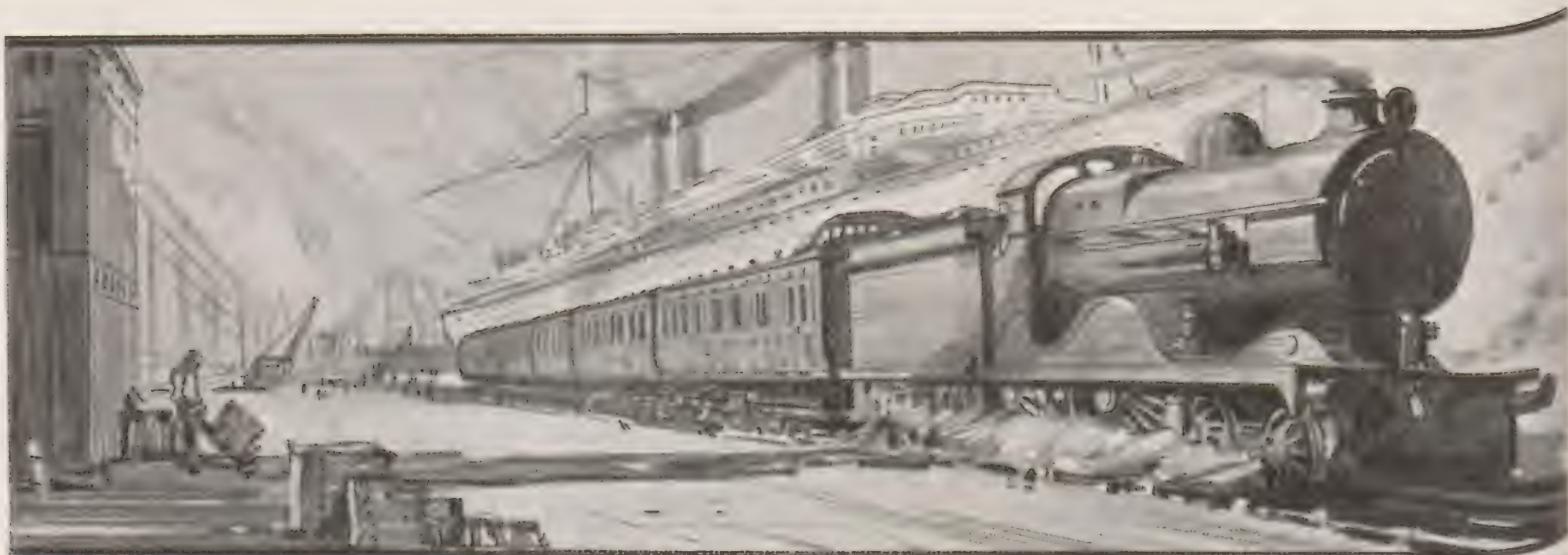
When these road tunnels are built, the journey from London to Paris ought to be done in an easy ten hours; thus London to Dover 80 miles, three hours, an hour in the tunnel, and six hours to Paris.

Travelling an hour through what would be practically a straight steel tube might not be very entertaining, but it would not be any more boresome than an average surface journey in the darkness of night.

But for the great international high roads from Manchester to Moscow, London to Lisbon, Birmingham to Brindisi, to become accomplished facts, it is first essential to secure road interests in the undertaking, and it is up to the motoring bodies—the Royal Automobile Club, the Automobile Association, and the Society of Motor Manufacturers—to take immediate action.



An American automatic wind screen cleaner operated by engine suction that sweeps the entire upper pane free of moisture.



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Hispano-Suiza
wins the Georges Boillot cup
Circuit de Boulogne July, 1922.

"It is the type of car which, having
once been decided upon, allows no
one peace until one is on the road"

—From "The Times" 27/7/22.

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BROADCASTING BUSINESS BREVITIES.

*Good Garage Service—A New Appointment—An Efficient Varnish Restorative—
Reductions—And Other Business Matters.*

GOOD GARAGE SERVICE.

One hears so many complaints in these days about indifferent garage service that it is gratifying to hear of exceptionally good attention to motorists' requirements. Miss Violet Wellesley, of the Manor House, Froyle, Alton, tells us of an excellent example of really good service extended to her by Hewins Garage of Taunton. West country motorists should make a mental note.

A NEW APPOINTMENT.

Following upon several years' association with the firm, Mr. D. A. Pearson has been appointed sales manager of Messrs. A. Harper, Sons & Bean. Ltd. Mr. Pearson's all-round experience of "Bean" interests—being largely concerned with the technical side of the business, in the practical details of design, and in the control and perfection of the Bean service system—should prove of excellent advantage to both producer and owner.

A REAL VARNISH FOOD.

Varnish being such a delicate subject it is affected by nearly everything to which it is exposed—hot, cold, or damp weather, rain, dust, petrol, paraffin or water, and the greatest care should be taken.

There are various ways of cleaning and polishing varnished parts, but very few really remove the foreign matter or restore the original lustre. One that will, however, is a French preparation, "Sublima." This is a real varnish food, and it renews, revives, cleans and polishes permanently all varnished parts—wood or metal. Retailed in bottles at 2s. 6d., 5s. 6d., 10s. 6d., and 15s., this product can be



Mr. T. G. John, Managing Director
of the Alvis Co., of Coventry.

obtained from George Ries, 146, Queen Victoria Street, E.C.4, and we use it personally with the greatest success.



The above photograph, taken at night, illustrates the
Studebaker spare parts store in their Willesden works.
The whole factory is illuminated by Benjamin Reflectors.

NEW BRITISH RECORDS.

At Brooklands on September 27th and 28th last, Captain J. F. Duff successfully established a new record for the "double twelve," driving a three-litre Bentley, standard model of four cylinders, 80 mm. by 149 mm., fitted with K.L.G. plugs.

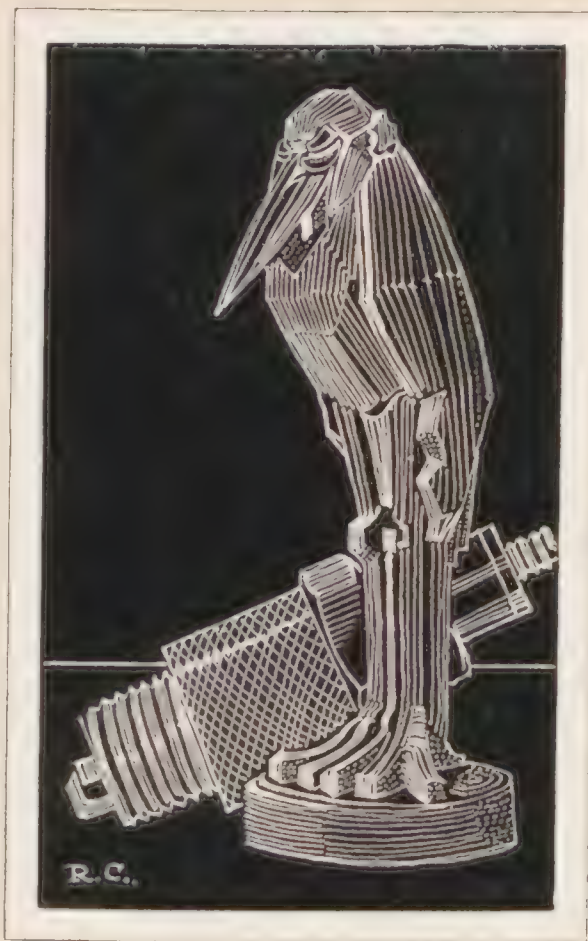
In the first 12 hours 1,033 miles 1,588 yards were covered, the average speed being 86.15 m.p.h.; thereby breaking every record in Class E from 1 to 13 hours, 100 to 1,000 miles, and 100 to 1,600 kilometres, except for the "three hour" and the "400 kilometre," which he lost by a delay of six minutes, owing to carburettor trouble.

On the second day Capt. Duff broke nearly every record he had previously set up with a run of 1,049 miles, at an average speed of 87.42 m.p.h. The total for the "double twelve" was 2,082 m. 1,756 yds, with a speed average of 86.79 m.p.h., thus establishing a new class and British record.

A SUBSTANTIAL REDUCTION.

At a recent meeting of directors it was decided by the Lanchester Motor Co., Ltd., to reduce the price of the Lanchester 40 h.p. six-cylinder chassis from £1,950 to £1,800, to take effect from October 1st, 1922. The company pointed out that this reduction is possible by reason of the lower cost of production. Notwithstanding this substantial reduction, the price still includes a most comprehensive and costly equipment in up-to-date accessories.

Oh, By The Way, - That Gadget!



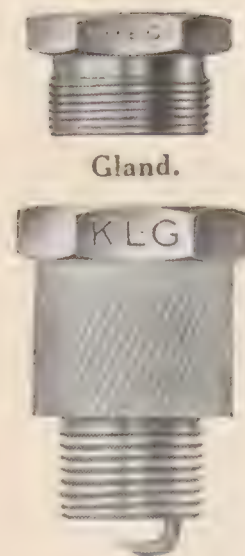
SUPPLEMENT TO
THE MOTOR-OWNER
OCTOBER 1922

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Central Electrode.

"K.L.G." type G. J. & K. plugs are all made in three units—the body, gland nut, and insulated centre. By simply unscrewing the gland nut the insulation may be removed for cleaning or inspection, without removing the body from the engine cylinder. There is a K.L.G. plug of this type for every average engine at 6/- (Renewable centres 3/-)



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GAITERS

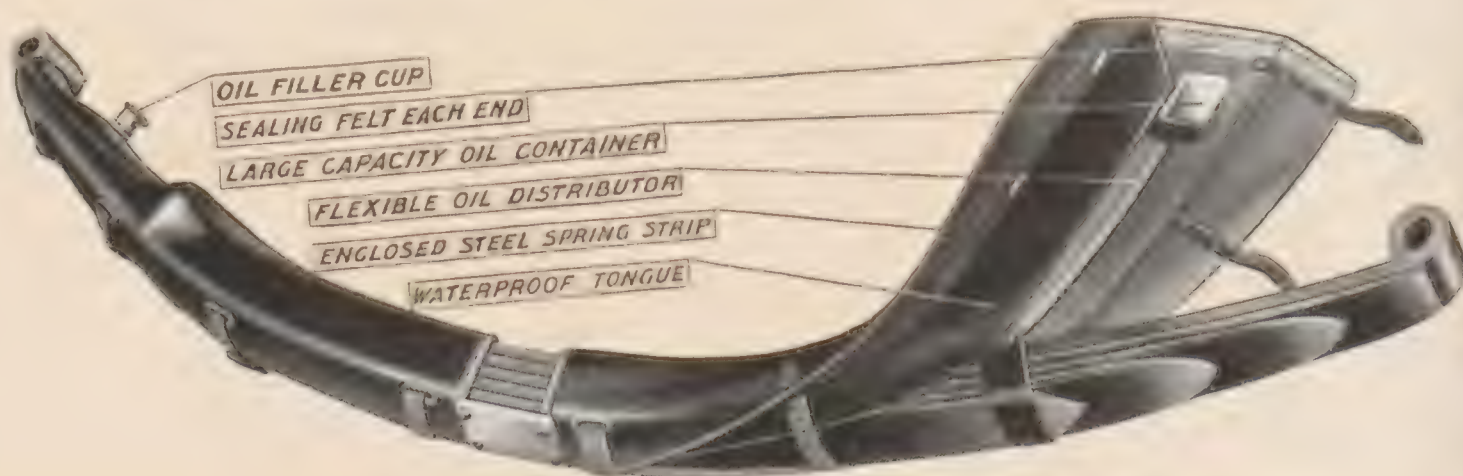
Before deciding upon Spring Gaiters for your car it will repay you to visit our Stand, where we shall be pleased to demonstrate the efficiency of our system by means of a working model under actual road conditions

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SOLID LEATHER
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CONSTANT LUBRICATION

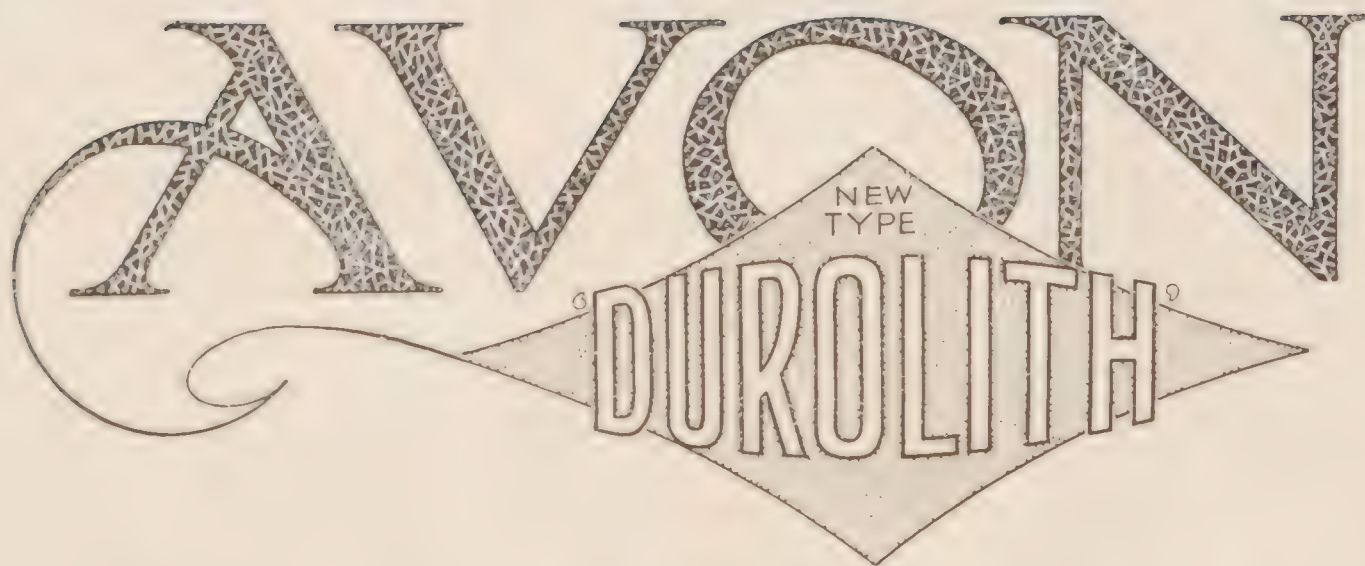
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Britain's latest boon to Motordom

The new Avon "Duroolith" beaded edge cover, now available in all standard and commonly used sizes, represents the high-water mark of achievement in motor tyre construction. Features of special interest to be noted are :

❶ Bold Non-skid Tread of exceptional depth and *toughness*. Super fabric casing.

❷ Improved bead, moulded to fit snugly in the clinch of the rim and practically indestructible.

❸ Every tyre fully up to marked size —*i.e.*, virtually an oversize.

Reduction of Price

Substantial reductions in the prices of all Avon Tyres are now in force and motorists will find that this new "Duroolith" represents the finest value in tyres that has ever been offered to the public.

OLYMPIA—Stand 528

The AVON INDIA RUBBER CO., LTD.

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Example Prices

Size	Duroolith			Tube	
	£	s.	d.	s.	d.
26 x 3	2	4	3	8	0
28 x 3 (700 x 80)	2	5	9	8	6
30 x 3½	3	6	9	10	3
710 x 90	2	17	3	9	6
760 x 90	3	7	3	10	0
810 x 90	3	12	6	10	6
765 x 105	4	2	3	12	3
815 x 105	4	8	0	12	9

Electricity

The Safest Cleanest
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of Car Lighting.

THAT the advantages of electricity for car lighting are universally recognised is obvious from the fact that practically every new car (large or small) now being made is equipped accordingly.

Whatever system of electric lighting is used it is necessary to choose THE RIGHT LAMP for each case in order to obtain the best results.

OSRAM LAMPS (AUTOMOBILE TYPE) meet every requirement. In addition to the invaluable property of maximum strength, they embody every improvement suggested by Motoring Experts over many years.

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INEXHAUSTIBLE FLASH LAMP

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the very latest development in Flash Lamps. Provides the absolutely dependable light at last. The only lamp of its type made in England.

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THOUSANDS OF MOTORISTS ARE NOW USING IT.

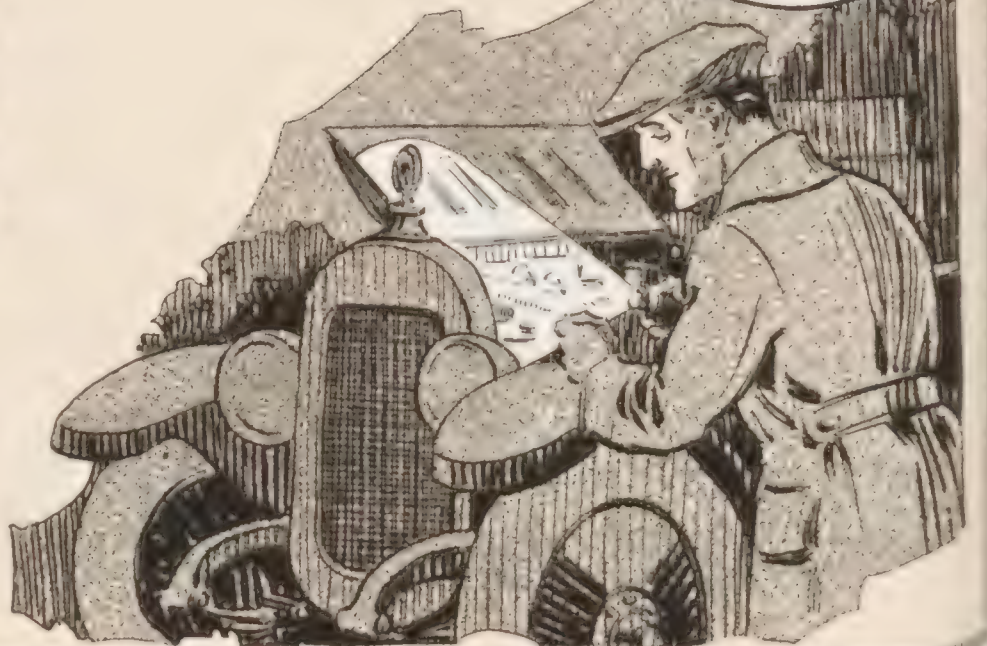
Sold by all leading Electricians, Garages and Motor Supply Houses.

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THE GENERAL ELECTRIC CO., LTD.

Head Office: Magnet House, Kingsway, London, W.C.2

Price
26 -
complete



THE CHARM OF ACCESSORIES.

THERE is an enthusiastic motor-owning friend of mine who, when we meet at the Motor Show, always trots me off into the gallery to inspect his latest discovery in the accessory line. Last year I remember I protested somewhat strongly against this expedition, suggesting that he could not possibly have seen half of the car designs in which he ought to take an interest. His reply was that, now all the chassis were much of a muchness, all the body-work more or less standardised, and all the equipment treated likewise, the only source of real fun that could be had out of a motor car was in the accessories, whereby alone could one's individual likes and dislikes be expressed.

I cannot see precisely eye to eye with this gentleman, but it is impossible to deny that there is a great deal in his viewpoint. It might well be supposed that here is one of those people whose cars would be bristling with all kinds of gadgets. Such, however, is not the case. If he gets a substantial fraction of his motoring fun out of accessories, it is by indulging a taste for what is both useful and the best of its kind. Moreover, although the equipment of the modern car is exceedingly complete, there are always many ways in which it can be added to.

Let us take a few cases in point. Almost every car to-day is provided with a tool kit, which is positively guaranteed to work. In nine cases out of ten, however, the tools are of poor quality, by no means pleasing to handle (anything worse than the average shifting spanner as supplied with a car can scarcely be imagined), and clumsy to a degree. It is true that roadside repairing is not called for so frequently as it once was, but the difference in comfort between using really good tools to one's own selection and rubbishy so-called outfits is a difference of the order of that which separates a Rolls-Royce from a cycle-car.

Again, take the case of detachable wheels. I am not aware that any car-producer sends the spare wheel out protected by the envelope that it ought to wear. Such an envelope, however, not only keeps the spare tyre looking decent, however decrepit its tread may be, but also serves to protect a new cover from the effect of sunlight, which is the worst enemy indiarubber can possibly have.

Then, in connection with the electric installation, the inclusion of a hydrometer in the equipment of the garage is liable to lead to a saving of pounds as well as the enhancing of the efficiency of the installation. When one has a little instrument of this kind it is a pleasure to use it, whereas if one does not have it one leaves the batteries neglected, and then feels irritated to find that they have got into a very bad condition.

Another instance which at once springs to mind is the vulcaniser. Of late years these things have been improved almost out of all knowledge, and in spite of the strides that have been made in the construction of tyres they are still easily able to pay for themselves in a season. To anyone who is not utterly bored with any kind of practical work, the vulcanising of a patch into a tube or of a plug into a cover cut means a very interesting five or ten minutes. Yet once more, what could be more informative than an instrument like a gradient meter, or what performs the same purpose with even greater accuracy—a dashboard aneroid?

There are almost as many lies told about the acclivity of hills as there are about speeds on the flat. Something that tells one the unerring truth is informing one as to how one's engine is pulling, and is therefore worth cultivating as a mechanical expert.

These instances I have given make no pretensions to stating the whole case. The thing to do is to go to the Shows with the avowed intention of not neglecting that section of them which deals so largely with the comfort and convenience of motoring. Let it be borne in mind that the extra accessory of one year is apt, as was well shown in the case of spring gaiters, to prove the standardised equipment of the next. I have no sympathy with those who cannot trust the designers of their cars, and who must be always changing carburetters, inserting different kinds of pistons and fiddling about with one thing and another, but I do hold that it is only the man who reviews the clever things that accessory makers put before him, and makes an intelligent selection therefrom, who is capable of extracting all the fun and interest that can be got out of a motor car.

Wilfred Gordon Aston.

WHAT IF YOUR ELECTRIC SET FAILS?

FOR some time past there have been indications of the need among motorists for a satisfactory and permanent system of auxiliary lighting upon cars already fitted with the electric dynamo system. Anticipating the growth of the desire for a "stand-by" in case of electric lighting trouble, Allen Liversidge, Ltd., have designed some auxiliary outfits employing the most reliable of all lighting mediums—dissolved acetylene—which not only give the owner a complete insurance against being held up through the failure of an electric set but provide really powerful lights, enabling him to proceed on his journey at speed. An especially attractive type of auxiliary lighting is the "A.L." Spot light. Burning dissolved acetylene through an ordinary burner, the lamp works on a universal joint, so that the rays may be directed in any required direction.

In the gallery at Olympia, quite close to where they were last year, Ross Courtney and Co. will be exhibiting their hydraulic jack, first put on the market at the beginning of last season, but which has since been improved in several important points, now being fitted with a patent head enabling the jack to be easily

withdrawn immediately it is lowered. Also, the same firm will exhibit a complete display of greasers, cocks, petrol-filters, filler caps, grease guns, strainers, etc., together with a complete range of their terminals.

Embracing accumulators and their sundries, air-inlets, easy-starters, dry batteries, motor belting, etc., a large assortment of motor accessories will be displayed on Stand No. 426 at Olympia by A. J. Dew and Co., and among items of special interest, we would particularly point out the following:—The Endolite emergency lamp set, an efficient alternative lighting method for electrically equipped cars and sold at an extremely moderate price. There are three lamps, strongly made, each giving good driving light and which can be relied upon in any weather. Then there is the Endolite box of fifty-two assorted automobile fuses (glass and fibre) of the sizes most called for, together with a tin containing 55 yards of fuse wire, the complete set being sold at 33s. 6d. In addition, there is the Endolite spring opener and grease injector, which is an extremely handy tool to either motorist or garage owner.

Claiming that it will entirely eliminate

An attractive type of auxiliary lighting outfit is the A.L. Spot Light (centre illustration), which is made by Allen Liversidge, Ltd. It burns dissolved acetylene, and works on a universal joint. On the left is illustrated the Miller Starter, which

include their patent brush gear, also the Bendix drive, and on the right is one of the large assortment of Autohorns manufactured by Alfred Graham & Co. The particular model illustrated is of the vertical type, and the price is two guineas.



BE SURE OF YOUR SPEED, AND THE TIME.

battery trouble, one of the newest inventions is the Batometa. Its function is to show at a glance the condition of the batteries at any time. The indicating medium is a column of mercury which turns "pink" as the current weakens and "red" if the discharge is prolonged. The action of recharging sends a reverse current through the Batometa, which removes the colour and restores the mercury to its original state. This little instrument can be fitted to the dashboard of any car without altering its existing wiring, and its use should enable the observant driver to prolong the life of the battery cells. The Batometa is guaranteed for five years and its price is £3 3s., while the manufacturers are the Batometa Company, of Birmingham.

Visitors to Olympia should obtain a copy of an interesting booklet entitled "Correct Lubrication," already recommended to readers of THE MOTOR-OWNER, which can be obtained upon application to the Vacuum Oil Co.'s stand, No. 453, where they will also be exhibiting their Gargoyle Mobiloils and greases.

An interesting feature on the stand of the Marles Steering Gear Co. will be a large skeleton model of the touring type

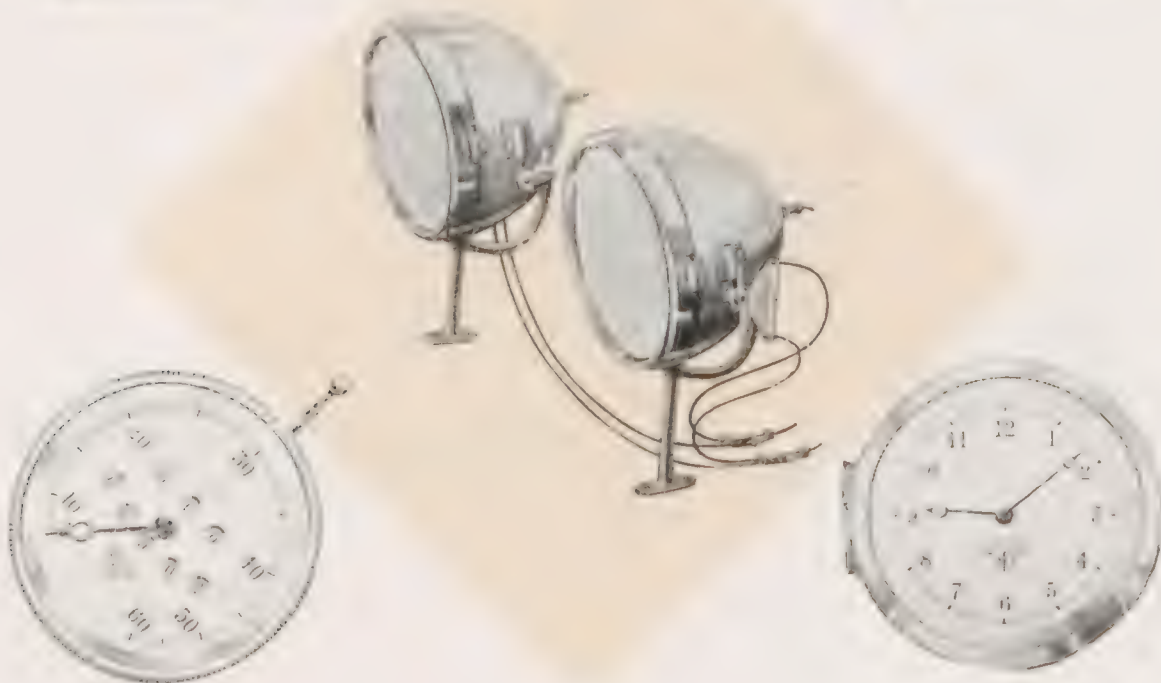
of gear which will illustrate their principle. They will also show various examples of their patent single roller steering-gear for cars up to 20-40 h.p.; various component parts of different models, and parts taken from gears which have been subjected to many thousands of miles use.

Inventions to solve the dazzle problem are always welcome, and one which does much to eliminate the danger is a device which enables head-lamps to be dipped at will, keeping all direct rays below the eye level, and allowing concentration of the light where it is required—on the road! This is the function of the Rapson patent dipping headlight mechanism, which will be exhibited by the Rapson Tyre and Jack Co., at the White City, on Stand No. 120, and examples will also be shown fitted to the Prince of Wales's Crossley, the Duke of York's two Armstrong-Siddeleys, and Lord Milford Haven's Rolls-Royce at the stands showing these special cars.

The considerate motorist, bearing in mind the axiom which bids him use the horn sparingly but effectively, will be particularly interested in Klaxon's stand, where all their usual well-known lines will be on view, including the standard A. J.

An invention which does much to eliminate the dazzle danger is a device which enables headlamps to be dipped at will, and this is the function of the Rapson patent dipping headlight mechanism (centre illustration). Time, and speed information is always

useful to the motorist, consequently clocks and speedometers are necessary accessories to one's car. The two bottom illustrations are of the Smith speedometer and the Smith popular clock respectively, both of which are of moderate price.



THE ART OF CARRYING CLOTHES.

instrument, brought up to date by the addition of an improved bracket; the new Klaxonets; and the Klaxet, which is a new model specially designed for small light cars.

Since last Olympia successful efforts have been made by J. B. Brooks and Co. to effect considerable reductions in the price of their special trunks for motorists. They are now able to supply their chested trunks at prices ranging from £30 down to £8. The latter price is for their latest two-case chested trunk, No. 4580, made in a size suitable for any luggage grid—viz., 30 in. by 18½ in. by 17½ in. The outer case is of three-ply wood as in the more expensive models, the frame being of hardwood at each end. This frame takes the strain of the holding down straps and carrying handle, a further strong frame at the bottom of the trunk giving rigidity. The more expensive trunks are fitted with the Brooks "Instantus" holder, a metal "vibration and thief-proof" means of attaching luggage to the grid—instantaneous attachment and detachment of the luggage being effected. By a moderate extra payment these most desirable fitments can be had with any of Brooks' trunks. Visitors should ask to see them on stand No. 465.

All motorists will be interested in an engine revolution indicator which will be shown by the Waltham Co. on Stand No. 353. Its special feature is that it indicates the mileage reading for each gear-box speed, telling whether the engine is functioning with the efficiency for which it was designed, and helping the beginner to decide the most favourable engine speed on which to make each gear change. Each dial is specially calibrated not only for a particular engine, but for the different axle ratios and sizes of tyres which may be fitted on one make of chassis. It is claimed that the indicator is not subject to variations in temperature, humidity or altitude. The Waltham Watch Co. will also be exhibiting all classes of their automobile clocks.

On Stand No. 146 at the White City there will be exhibited a varied assortment of electrical autohorns which are standard equipment on over thirty makes of British cars. These will be shown by Alfred Graham and Co., and will include the "Graham" horizontal diaphragm models from £2 17s. 6d.; the "Graham" vertical diaphragm models from 35s.; electric horn pushes; the "Graham" motor-phone at £6 6s.; the "Graham" dimmer

Decided efforts have been made by J. B. Brooks & Co. to supply a special trunk for motorists of a price within reach of all. for they now have in stock chested trunks at prices ranging from £30 down to £8. The latter price is for the two-chested trunk.

No. 4580, as illustrated, which is made in a suitable size for any grid. An interesting feature on the stand of the Marles Steering Co. will be a skeleton model of the touring type of gear (bottom illustration) which will demonstrate their principle.



A GOOD JACK SAVES BAD LANGUAGE.

switch at 21s., and the "B.A.C." car lock, designed to prevent car stealing. This lock can be fitted to any make of car, whether having fixed or movable steering columns.

All motor-owners will agree that silent springs are essential to comfort in the car, and perfect lubrication—very often neglected—is essential if the springs are to retain their efficiency. The "Rappa" spring gaiter, designed by E. Harrison and Sons, is an effectual means to this desirable end. It is a neatly fitting leather gaiter, made from good and suitable hides, incorporating an oil box fed from the outside, supplying in its turn a closely-wound steel spiral spring which is kept filled with oil. Each flexion of the car springs also flexes the spiral spring, allowing just the right amount of oil to do its appointed work. The "Rappa" spring gaiters, complete with lubricators, are supplied at 10d. per running inch of length, inclusive. For the benefit of owners not desirous of scrapping their existing gaiters the "Rappa" road spring lubricating system is supplied at 2s. 6d. each, comprising large oil filler, oil container, flexible oil distributor and end plugs.

Amongst other of their well-known accessories, S. Smith and Son (M.A.), Ltd., will exhibit the Smith speedometer. This instrument, being built on the centrifugal principle, ensures a perfectly steady pointer no matter how bumpy the road. Various lengths of flex drive are kept in stock, so that speedometers suitable for any type of car can be delivered by return of post. The new Smith Popular clock; the Smith Touchwood mascot, which is one of the latest additions to the very extensive range of car mascots sold by Smith's (M.A.); the Smith Double Quick jack; and the Radamax plug tester are other Smith exhibits.

All the accessories described in the above paragraph, and, in fact, every accessory of Smith manufacture, is guaranteed under a unique service scheme, whereby any fitting proving faulty through any cause whatsoever is replaced within forty-eight hours or less. This is a point which motorists on tour would do well to remember.

From our own experience with Smith accessory equipment we are able to speak in enthusiastic terms. They function to perfection.

An easily handled jack, which engages in special fittings that are carried permanently on the axles of the car, is the Rapson super-jack (centre illustration). A few turns of the locating handle raises the car with astonishing ease. It is in three sizes—for

heavy, medium, and light cars. Any device which will help the situation, even if not actually solving the problem of "dazzle," is of considerable use, and this can be said of the two dimmer switches—the Courtesy and the Graham, respectively—which are illustrated below.



WHEN THE PLUG IS MISSING, WHAT'S AMISS?

DURING the war, when it became necessary to extract every ounce of horse-power from aeroplane engines, while maintaining the highest standard of reliability, the leading plug designers were actually called into consultation with the Air Ministry, and in many cases for each new engine a new plug was designed exclusively for use in it.

Naturally for normal motoring, such specialisation is neither necessary nor desirable, but the fact remains that the superiority of British aeroplane engines was attained by great concentration on details of which sparking plugs were by no means the least or most easily decided.

In the selection of plugs for any car engine the aim should be to find a plug of such design that the heat generated in the cylinder will raise the plug to the highest possible temperature that will not cause pre-ignition. The higher the working temperature of the plug the less the danger of sooting or oiling up.

In this matter, one is always working between the devil and the deep sea, by heat and pre-ignition on the one hand, and by sooting and oiling up on the other hand. In pre-war days the majority of plug manufacturers produced very few models, the difference between them chiefly consisting of variations in the size or length of thread.

Now, however, a great deal of data has been compiled from experience of all types of engines, and advice as to the most suitable type of plug for any particular purpose is readily obtainable. As an example, the "K.L.G." Co. have compiled a chart of recommendations that embraces practically every European and American motor-car, motor-cycle, or marine engine. Such is the degree of specialisation to which we have attained in these days.

Having decided upon the correct type of plug for his engine, the motor-owner's next interest is to maintain it at maximum efficiency and to ensure the best possible service being obtained from it.

With this object in view, namely, a plug that is readily detachable and has the great advantage that the whole of the internal insulating surface can be exposed for examination or cleaning, certain makers have broken right away from the groove into which sparking

plugs tended to settle prior to the war, and have produced plugs which are really ingenious in design and which may be detached without even taking the body of the plug out of the engine cylinder.

It must be remembered that when a plug starts to misfire the cause of the failure is almost invariably the deposit of burnt oil and soot on the surface of its internal insulation. It is very rarely due to oil on the actual sparking points. To clean a plug which has started to misfire, or which has entirely ceased to function, is in these days of detachable plugs a perfectly simple matter.

Having dismantled the plug, the internal surface will be found to be covered with a coating of black soot or burnt oil. In most cases this can be wiped off with a soft rag dipped in petrol, or in some cases it may require to be gently rubbed with a piece of emery cloth. In the latter case it must be borne in mind that the insulated centre of the plug is necessarily somewhat delicate, and the greatest care must be taken not to do more than remove the deposit while leaving a clean and smooth surface on the affected part.

After cleaning the insulated centre the body of the plug may be scraped out with an old knife so as to rid it of carbon deposit which may have accumulated on its internal walls. Having cleaned the various components of the plug, it may be reassembled. In the case of such plugs as the "K.L.G." type G., care should be taken to ensure that the nut which retains the insulated centre in the body is well tightened to obviate any risk of gas leakage.

When this has been done, the sparking points should be readjusted. The width of gap which gives the best results is found to vary slightly in different engines and with different forms of ignition. However, for ordinary use with a magneto a gap of .025 in. will be found approximately correct, while with a battery and coil system a gap of about 5/1000ths larger is recommended.

In adjusting the gap of a sparking plug the nickel point of the insulated centre should not be disturbed, but the earth point which is attached to the body of the plug should be bent as required.



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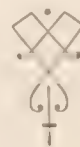


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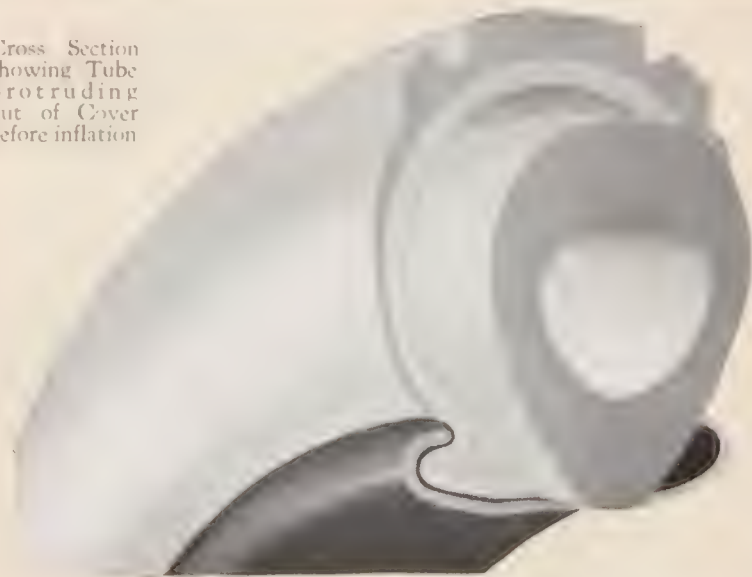
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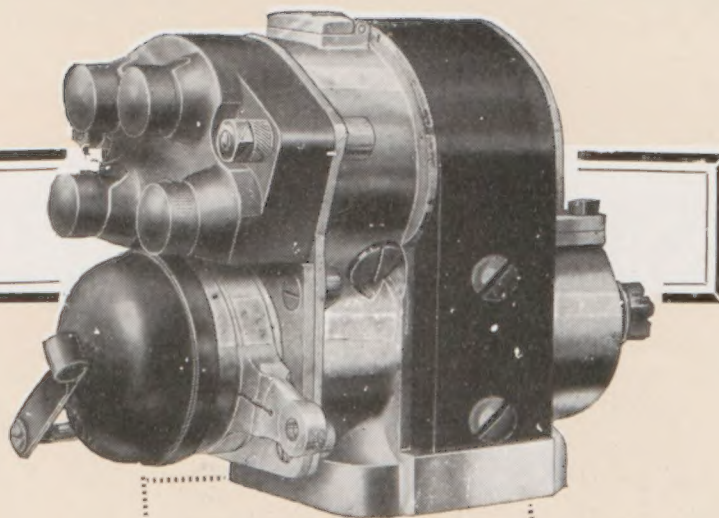
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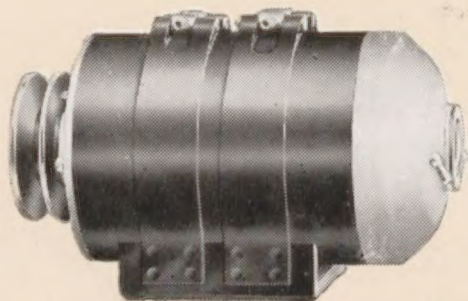
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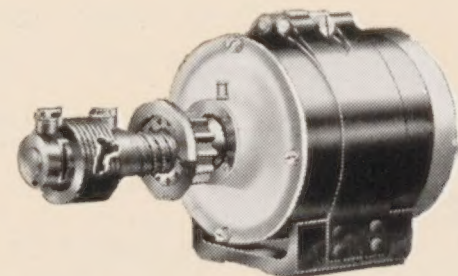
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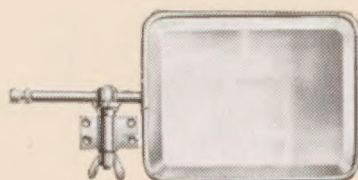
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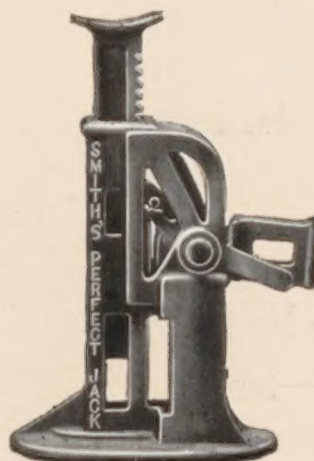
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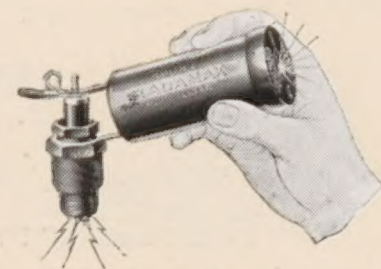
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